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SEASON OF 1929

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U. S. Department of Agriculture

WISEMAN-DOWNS CO. INC.

FARM MACHINERY AND SEEDS

ORIGINATORS & GROWERS
OF THE
"WISDOM" TOMATO

34 EAST PRATT STREET
BALTIMORE, MD.

D. N. Shoemaker Vegetable Seed Trials JAN 28 1929

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ORDER SHEET --- WISEMAN-DOWNS COMPANY, Inc., BALTIMORE, MD.

HOW TO ORDER, REMIT, ETC.

Remittance should be made in the form of an Express Money Order, P. O. Money Order, Bank Draft or Registered Letter.

Orders from unknown correspondents must be accompanied by the cash or satisfactory reference. Baltimore City reference preferred.

Be sure to sign your Name, P. O. address and Shipping address to all orders.

We make no charge for cartage or delivery of goods to any Railroad Station, Steamship Line, or Express Office in Baltimore City proper.

We deliver by Parcel Post free to any Post-office in the United States, all cash orders for Flower and Garden Seed at Catalog Price, except Peas, Beans, Corn and Field Seeds. No seed delivered free unless the order is accompanied with the cash. For Peas, Beans, Corn and Field Seeds, add to Catalog Price 8 cents a pint and 10 cents a quart. For each additional quart add at the rate of 2 cents a quart, for distances not over 150 miles from Baltimore.

PLEASE NOTICE

We give no warranty, expressed or implied, as to description, quality, productiveness or any other matter of any Seeds, Bulbs or Plants we send out and we will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms they must at once be returned.

WISEMAN-DOWNS CO., Inc.

Your Name.....

Post Office.....

Freight or Express (if different from P. O.).....

County of.....State of.....Date.....1929

Amount Enclosed $.....

QUANTITY	NAMES OF SEEDS, PLANTS, ETC., WANTED	PRICE	
	AMOUNT CARRIED FORWARD		
	(OVER)		

QUANTITY	NAMES OF SEEDS, PLANTS, ETC., WANTED	PRICE	
	AMOUNT BROUGHT FORWARD		

PLEASE DO NOT WRITE IN SPACE BELOW

PLANTING, MATURITY AND WEIGHT TABLE

This is for field planting, and where plants and roots are stated, it is necessary to have them ready before-hand. The third column indicates the distance that the plants should stand in the rows, and where seed is sown they should be thinned out to this distance. The fifth column indicates maturity from the time plants are planted in the field or seed is sown in the field. Also note that the last column is the approximate weight of seeds and not products. Time of planting and maturity is for latitude of Baltimore, Md.

*Indicates that the crop can either be planted in the Spring or Fall; if in the Spring, February to April; in the Fall, August and September.

	Time to Sow or Plant	Distance of Rows Apart	Distance of Plants in Rows	Quantity per Acre	Ready to Use	Approximate Weight of Seeds per bu. in lbs.
Alfalfa	*May to Sept.	Broadcast	Broadcast	20 lbs.	Next Year	60
Artichoke—Tubers	April to May	2½ ft.	2 ft.	6 to 8 bu.	Sept. to Oct.	50
Asparagus—Seeds	April to May	15 in.	4 to 6 in.	8 to 10 lbs.	3 years	60
Asparagus—Roots	March to April	6 to 8 ft.	12 to 18 in.	4,000 to 7,000	2 years	.....
Beans—Dwarf	April to Aug.	2½ ft.	4 to 6 in.	90 lbs.	8 weeks	60
Beans—Navy	May to June	2½ ft.	6 in.	45 to 60 bus.	Winter	60
Beans—Soja	May to June	Broadcast	Broadcast	1 to 1½ bu.	Fall and Winter	60
Beans—Pole	May to June	4 ft.	3 ft.	40 lbs.	10 weeks	60
Beets—Table	March to July	12 to 18 in.	4 in.	6 to 8 lbs.	1½ to 3 mo.	19½
Beets—Sugar	April to June	2½ to 3 ft.	6 to 8 in.	5 to 6 lbs.	Fall and Winter	19½
Buckwheat	June to Aug.	Broadcast	Broadcast	1 bu. or 50 lbs.	Fall	50
Cabbage—Plants (early)	March to April	30 in.	15 to 20 in.	10,000 to 14,000	June and July	54
Cabbage—Plants (late)	July to Aug.	3 ft.	2 ft.	7,260	Fall and Winter	54
Carrot	April to June	1 to 2 ft.	3 to 4 in.	3 to 4 lbs.	45 to 70 days	28
Cauliflower—Plants	March to April	2½ ft.	2 ft.	8,000 to 10,000	3 months	54
Celery—Plants	June to Aug.	3 to 4 ft.	6 to 9 in.	15,000 to 30,000	4 to 5 months	37
Clover—Red and Sapling	*Feb. to Sept.	Broadcast	Broadcast	8 to 10 lbs.	Next Year	60
Clover—Alsike	*Feb. to Sept.	Broadcast	Broadcast	5 to 8 lbs.	Next Year	60
Clover—Crimson	July to Sept.	Broadcast	Broadcast	12 to 15 lbs.	May 1	60
Corn—Garden	April to July	3 to 3½ ft.	9 to 15 in.	8 lbs.	2 to 3 months	44 to 50
Corn—Field (drills)	April to July	3½ to 4 ft.	10 to 18 in.	7 to 8 lbs.	3 to 4 months	56
Corn—Field (checked)	April to July	3½ to 4 ft.	3½ to 4 ft.	6 lbs.	3 to 4 months	56
Cucumber	April to July	4 to 5 ft.	4 ft.	2 lbs.	2 to 2½ months	39
Egg Plant—Plants	May to June	3 ft.	2½ to 3 ft.	5,000 to 6,000	60 days	39
Endive	August	18 in.	12 in.	4 to 5 lbs.	2 to 2½ months	26
Grass Seeds—(Light)	*Feb. to Oct.	Broadcast	Broadcast	1½ to 2 bu.	Next Year	14
Grass Seeds—(Lawn)	*Feb. to Oct.	Broadcast	Broadcast	80 to 100 lbs.	8 to 10 weeks	20
Horseradish—Roots	Feb. to March	2½ ft.	12 to 18 in.	12,000 to 15,000	6 to 8 months	.....
Kale—Spring	*Feb. to Sept.	Broadcast	Broadcast	6 to 8 lbs.	5 to 6 weeks	56
Kale—Winter	July to Sept	Broadcast	Broadcast	3 to 4 lbs.	Fall to Spring	54
Kohl Rabi—Plants	April to May	1½ to 2 ft.	10 to 12 in.	21,000 to 34,000	2 1-3 to 3 months	56
Lettuce—Plants	April to Sept.	12 to 15 in.	6 to 8 in.	40,000 to 80,000	1½ to 2 months	35
Melon—Musk	May to July	4 to 6 ft.	4 to 6 ft.	2 lbs.	2½ to 3 months	32
Melon—Water	May to June	8 to 10 ft.	8 to 10 ft.	3 lbs.	3 months	35
Millet—German	May to July	Broadcast	Broadcast	1 bu.	6 to 7 weeks	50
Mustard	*March to Sept.	Broadcast	Broadcast	4 to 5 lbs.	6 to 8 weeks	56
Oats—Spring	March to April	Broadcast	Broadcast	1½ to 2 bu.	July 1	32
Oats—Winter	*Feb. to Sept.	Broadcast	Broadcast	1½ to 2 bu.	June 20 to July 10	32
Okra	April to May	2½ to 3 ft.	8 to 10 in.	8 to 10 lbs.	60 to 70 days	48
Onions—For large bulbs	April to May	12 to 14 in.	.....	4 to 5 lbs.	Aug. to Sept.	39
Onions—For sets	April to May	10 to 12 in.	.....	40 to 50 lbs.	Aug. to Sept.	39
Onion Sets	March to May	12 in.	4 in.	15 to 16 bu.	July	32
Parsley	March to April	12 in.	.....	15 lbs.	July	42
Parsnips	March to April	18 in.	4 to 6 in.	5 to 7 lbs.	Fall and Winter	18
Peas—Smooth	Feb. to March	2½ to 3 ft.	.....	84 to 112 lbs.	7 weeks	60
Peas—Wrinkled	April to May	2½ to 3 ft.	.....	84 to 112 lbs.	7 to 9 weeks	56
Peas—Canada Field	Feb. to April	Broadcast	Broadcast	90 lbs.	June 15	60
Peas—Cow	May to July	Broadcast	Broadcast	1½ bu.	3 months	60
Pepper—Plants	May 15	30 in.	15 to 18 in.	11,000 to 14,000	2 to 2½ months	28
Potatoes—(Early)	March to April	27 in.	10 to 12 in.	8 to 12 bu.	June to July	60
Potatoes—(Late)	July to August	30 in.	15 to 18 in.	8 to 10 bu.	Oct. to Nov.	60
Sweet Potatoes—Plants	May 15	3 ft.	20 to 24 in.	7,000 to 8,000	Sept. to Winter	45
Pumpkin	May	8 to 10 ft.	8 to 10 ft.	2 lbs.	Fall	24
Radish	March to Aug.	10 to 15 in.	3 in.	8 to 10 lbs.	24 to 40 days	56
Rape	*Feb. to Sept.	Broadcast	Broadcast	6 to 8 lbs.	6 to 8 weeks	56
Rhubarb—Roots	March to April	4 ft.	2 to 3 ft.	5,000 to 7,000	Next Year	.....
Rye	Aug. to Nov.	Broadcast	Broadcast	1 to 2 bu.	April 20	56
Salsify	March to April	1½ to 2 ft.	3 to 4 in.	6 to 8 lbs.	Fall and Winter	18
Spinach—Early	*Feb. to Sept.	Broadcast	Broadcast	15 to 20 lbs.	8 Weeks	48
Squash—Spring	May	4 ft.	3 ft.	3 lbs.	July	26
Squash—Winter	May to June	6 to 8 ft.	6 to 8 ft.	2 lbs.	Fall and Winter	22
Teosinte	May to June	3 to 3½ ft.	8 to 10 in.	3 to 5 lbs.	Aug. to Oct.	46
Tobacco—Plants	May to June	3 to 3½ ft.	2½ to 3 ft.	4,800 to 5,000	Sept. to Oct.	35
Tomato—Plants	May to July	4 ft.	3 to 4 ft.	2,700 to 3,600	July until frost	20
Turnip	March to Sept.	Broadcast	Broadcast	1½ to 2 lbs.	1½ to 2 months	56
Vetch	Aug. to Oct.	Broadcast	Broadcast	50 lbs.	May	50
Wheat	Sept. to Oct.	Broadcast	Broadcast	1 to 1½ bu.	July 1	60

AFTER THE EARLY CROP IS OVER, PLANT A LATE CROP FOR WINTER USE

INSURE YOUR GARDEN WITH WISEMAN-DOWNS SEEDS

BEST BY TEST

WISEMAN-DOWNS CO., Inc.

Farm and Garden Annual

1929

BEST BY TEST

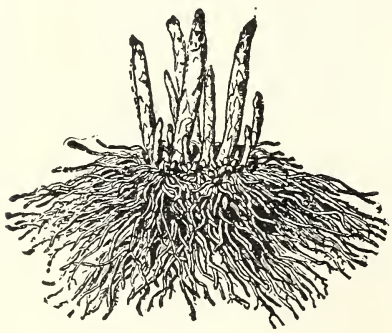
BROCOLI

True Italian Sprouting

We are pleased to announce that we have received direct from the growers in Italy, a strain of the highest type of this delicious vegetable, just recently introduced in this country. There are several types of the Sprouting Brocoli and great care should be taken in buying the seed. The "sprouting type" is quite distinct from the cape or heading variety. Some varieties will shoot to seed too quickly. The type which we offer is the truest strain, green headed, green sprouting, Calabrese Brocoli. It will develop in about 40 days, producing a large head like Cauliflower, consisting of a compact cluster of bluish-green flower heads. Plant and grow much as you would cauliflower or cabbage. Select moist soil if possible. **Pkt. 50c; oz. $1.50; ¼ lb. $5.00; lb. $16.00.**

BRUSSELS SPROUTS

This vegetable is used in the Fall and early Winter and by some considered more tender and delicious than any cabbage. The plant resembles the cabbage, the edible part being the numerous very small heads or sprouts, an inch or two in diameter, formed on the stalk at each leaf joint. Culture is the same in all essentials as the cabbage, except the leaves should be broken down in the Fall to give the little heads more room to grow. **Pkt. 10c; oz. 20c; ¼ lb. 60c; lb. $2.00.**



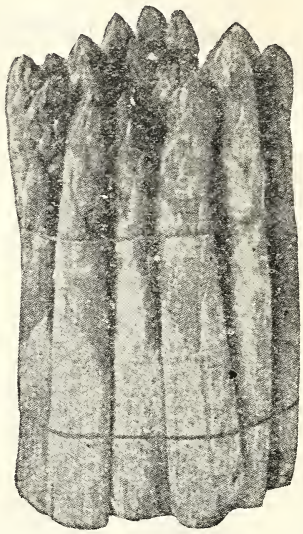
ASPARAGUS ROOTS

4,000 to 6,000 roots are required for an acre.
We offer only two-year roots.

We make a specialty of growing Asparagus Roots, taking care to have each variety true to name. Can supply any quantity in Spring and Fall.

	Per 100.	Per 1,000.
MARY WASHINGTON	**$1.50**	**$12.00**
MARTHA WASHINGTON	**1.50**	**11.00**
PALMETTO	**1.00**	**9.00**

ASPARAGUS



This can be grown from seeds or roots, the latter preferred. It is one of the earliest and most delicious of Spring vegetables. Seeds should be sown thinly in early Spring in rows 1 foot apart. Thin out the weakest plants so the remainder will be 4 inches apart. When 1 year old transplant in the permanent bed, from where it can be cut 3 years later. One ounce of seed will sow about 60 feet of drill. About 400 plants to the ounce. Asparagus may be grown in almost any soil or situation, but special success is attained in thoroughly enriched, deeply dug sandy loam. Beds cared for improve with age, lasting for many years.

PEDIGREED WASHINGTON (Rust Proof)—This variety was recently introduced by the U. S. Dept. of Agriculture and has grown into favor so rapidly that we take great pleasure in offering it to our most critical trade. Our stocks of this variety come from carefully selected roots from the original fields as introduced by the Dept. of Agriculture, and is the best stock available for seed purposes. The main feature of this variety is its rust resisting qualities. It is also a large variety and very prolific, of a good greenish color. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

PALMETTO ASPARAGUS—This is considered one of the best sorts. A large, dark green variety, of vigorous growth, having pointed tips. Very early and prolific. **Pkt. 10c; ¼ lb. 30c; lb. $1.00.**

BONVALLET'S GIANT ASPARAGUS—In 1898, when nearly every plantation of Asparagus in the country was destroyed by rust, there was found by a Chicago gardener one perfectly healthy plant in a field of celebrated Giant Argenteuil variety. This plant was carefully saved, and was the progenitor of what is now called Bonvallet's Giant. As will be inferred, this sort is practically rust-proof. Besides this, it has no superior for color, size, rapid growth, etc. **Pkt. 10c; ¼ lb. 30c; lb. $1.00.**

GIANT ARGENTEUL—A French white sort; very prolific large white shoots. We consider it superior to Conover's Colossal. **Pkt. 10c.; ¼ lb. 30c.; lb. $1.00.**

Asparagus Buncher, $4.50; by P. P. $4.75.

Asparagus Knives, 40c.; by P. P. 50c.

PRICES ON CORD

3-Ply Fine Cotton Cord	**50c lb.**
2-Ply Coarse Cotton Cord	**45c lb.**
2-Ply Jute Twine	**25c lb.**
Raffia	**20c lb.**

Prices on larger quantities on application.

All Prices Subject to Change Without Notice

GREEN POD BEANS--Dwarf

CULTURE—Sow in rows 2 feet apart, using about 1 quart to every 100 feet of drill. Keep the soil well stirred between the rows. Plant when all danger of frost is past, in succession, once every week until 8 weeks before frost. Sow 1 to 1½ bu. to an acre.

The "Wisdom" Stringless Bean

GROWN FOR QUALITY AND QUANTITY

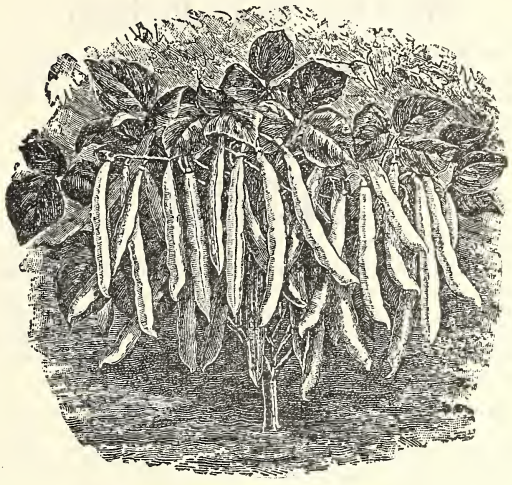
Absolutely Stringless **Tremendously Prolific**

The plant is strictly dwarf, very erect while young, spreading when laden with fruit, 14 to 16 inches high, very vigorous and hardy, will withstand slight frost, branches green throughout, flowers light pink, pods large somewhat variable, 5½ to 6 inches long, dark green, making it exceedingly attractive, tremendously prolific and absolutely stringless. In this we have at last produced an absolutely round pod stringless bean. One that has become a favorite with the trucker, packer, shipper, market gardener and the kitchen gardener. We feel that in putting this bean on the market, we are putting money in the pockets of the trucker and market gardener, as it will readily command a higher price in the market than any other variety known. During the season of 1925 although, very dry, it stood the test and produced wonderful crops. It certainly has proved a money maker for those who planted it, in fact we cannot emphasize its good qualities too highly. **½pt. 30c; pt. 50c; qt. 80c.**

BURPEE'S STRINGLESS GREEN POD is fast becoming one of the most popular beans in America. In earliness it is in the lead; in quality it is unexcelled, and as a cropper it is unrivaled. It is stringless in reality as well as in name. It is an abundant cropper, and the pods are full, round, fleshy and nearly straight. In length of pod it averages a little longer than Valentine· light green in color, and extremely handsome on the market bench. Quality is all that can be desired, so that for home use it is the just thing, and as it is a great cropper, market gardeners everywhere are finding it very profitable. We earnestly recommend it both for market and home use. **½ pt. 25c; pt. 40c; qt. 75c.**

DWARF HORTICULTURAL, or CHERRY—Vines very productive, compact, upright, with large leaves; pods medium length, cylindrical, curved, with splashes of bright red on a yellowish ground. **½ pt. 20c; pt. 35c; qt. 60c.**

Burpee's Stringless Green Pod



The "Wisdom" Stringless

BLACK VALENTINE—A splendid green string bean, with extra long, well-formed pods: tender early and delicious; very prolific and profitable to grow. **½ pt. 20c; pt. 35c; qt. 60c.**

FULL MEASURE—This new green-podded bush bean is a heavy cropper and very early, of fine shape, stringless and good quality. Its hardiness and great productiveness make it one of the very best bush beans. **½ pt. 30c; pt. 50c; qt. 75c.**

NAVY, or PEA BEAN—The standard shell bean; very prolific. **Pt. 25c; qt. 40c; pk. $3.00.**

GIANT STRINGLESS GREEN POD—An exceedingly productive and very handsome sort. Vines vigorous and spreading. The pods mature a few days later than those of Stringless Green Pod, average about ¼ incher longer and more nearly straight. The quality is very good for home use; suitable also for the market. **½ pt. 30c; pt. 50c; qt. 75c.**

BOUNTIFUL—An extra early flat podded sort. Absolutely stringless and of a very good quality. Very productive and a splendid shipper. Can be highly recommended to the trucking trade. **½ pt. 30c; pt. 50c; qt. 75c.**

WISEMAN-DOWNS CO.'S NEW PROLIFIC—A new prolific long-podded variety. Pods brittle and entirely stringless, produced on heavy vines throughout a long seaon. For all purposes. **½ pt. 30c; pt. 50c; qt. 75c.**

ANTHRACNOSE DISEASED STRING BEANS

A typical worthless bean pod grown from diseased plant.

This can be prevented by the use of SEMESAN.

See Page 46.

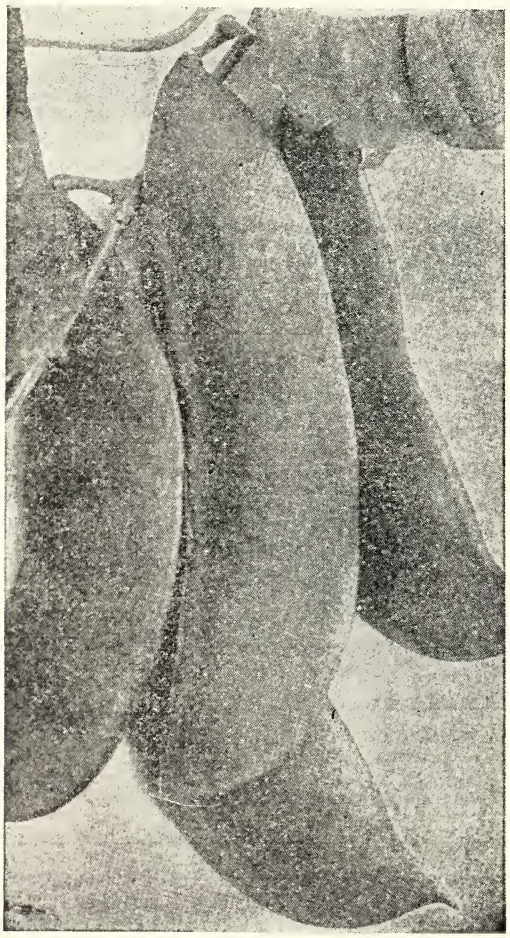
Owing to the extremely bad weather conditions in the bean growing sections during the past season, which has brought about a very short crop, we are compelled to withhold prices on larger quantities than quarts. If interested write for prices in larger quantities.

BEANS--Wax-Podded

DAVIS WAX—The most productive wax bean in cultivation. The vine is rustless and very vigorous, bearing its pods near the center in clusters. **½ pt. 25c; pt. 40c; qt. 75c.**

CURRIE'S RUSTPROOF BLACK WAX—The earliest. Habit upright and robust, holding their pods well from the ground. Foliage remarkably vigorous and healthy Pods long. flat and straight; beautiful golden color; unequaled for productiveness. **½ pt. 25c; pt. 40c; qt. 75c.**

WARDWELL'S KIDNEY WAX—Strong, upright bush; growth 15 inches in height; very productive; pods straight, fleshy, 5 inches in length and ½ inch broad. A rich golden yellow; brittle and quite stringless even when fully developed; of rich, luscious flavor, and are exceedingly brittle A great favorite with market gardeners. **½ pt. 25c; pt. 40c; qt. 75c.**



Burpee's Improved Bush Lima

RUST-PROOF GOLDEN WAX—Very vigorous in growth and extremely early. One of the hardiest of all wax sorts. Pods are straight, long and much thicker than the ordinary Golden Wax. A favorite with the home gardener. **½ pt. 25c; pt. 40c; qt. 75c.**

SURE CROP WAX—A selection from Currie's Rust Proof Wax, having black seed and differing from that sort in that it is stringless, more hardy, rust-resistant and a little later. Pods flat, and average an inch longer and somewhat thicker than Currie's and with a stronger plant growth. Very desirable. **½ pt. 25c; pt. 40c; qt. 75c.**

BEANS--Bush Lima

CULTURE—Soil should be of a rich loam. Plant in rows 2 feet apart and 6 inches in the row. Plant after all danger of frost has passed. A top dressing of well-rotted stable manure or some good fertilizer will help wonderfully.

DREER'S BUSH LIMA—Dwarf variety of Dreer's Improved Lima, which has been fixed in its character of a bush bean; very prolific, single plants often producing 50 to 200 pods. Equal in quality and tenderness to Dreer's Pole Lima. **Pt. 30c; qt. 50c; pk. $3.75.**

THE "BURPEE IMPROVED" BUSH LIMA—Will outyield Burpee's Bush Lima by fully one third. This greater yield is due to the increased size of both pod and beans. The dried beans are very handsome and generally show a greenish-white coloring, while dried beans of the Burpee Bush Lima, like those of the large Pole Lima, are pure white. **Pt. 30c; qt. 45c; pk. $3.50.**

FORDHOOK BUSH LIMA—An improved dwarf lima of the Kumerle type. The plant is vigorous and erect growing, bearing well above the ground. The pods are produced in large clusters, each containing 3 to 5 large beans of exceptionally fine quality. Much more productive than Kumerle and matures earlier. We consider this a decided acquisition to the dwarf Lima, possibly the best of the class. **Pt. 35c; qt. 60c; pk. $4.00.**

HENDERSON'S DWARF LIMA—These are very valuable because they do not need poles, and being so dwarf, can be planted close together. They are very early and prolific, continuing to bear until frost. **Pt. 30c; qt. 45c; pk. $3.50.**

BEANS--Pole Lima

CULTURE—Plant when all danger of frost or cold nights are over. Don't be afraid to put a liberal number in a hill, as this is cheaper than replanting. Set poles 4 feet apart each way. Thin out to 3 plants to a pole. One quart will plant 100 hills; 12 to 15 quarts per acre.

CARPENTERIA—This new bean, of recent introduction, is rapidly coming to the front as a favorits with market gardeners and truckers generally. While it has all the good qualities of the King of the Garden, it is even better, as the beans have a better appearance Color is a bright green. It is early, yet keeps bearing until frost. Pods are filled with 4 to 5 large mealy beans, of the very finest flavor. Vines are vigorous and strong in growth, producing a number of pods, well filled **Pt. 25c; qt. 40c; pk. $3.00.**

ENORMOUS POLE LIMA—Wonderfully prolific. The big, broad, thick, meaty Beans, holding their fresh greenish color, even when dried, are crowded tightly in the pods. The vines are so tremendously prolific that the handsome pods seem literally crammed on to every inch of the branches. Plant this variety and you will be pleased with the results. **Pt. 30c; qt. 50c; pk. $3.50.**

KING OF THE GARDEN LIMA—Vines very vigorous and productive. Pods 5 to 6 inches long, filled with 4 or 5 immense white beans of the finest quality. On account of its large pods, it is a favorite with market gardeners. It will come into bearing sooner and will make larger pods if not more than 2 vines are left to grow on a pole. Seed very large, ovoid, flat, with slight greenish tinge. **Pt. 30c; qt. 50c; pk. $3.00.**

DREER'S IMPROVED, or CHALLENGE—Vines stout, vigorous and productive. Pods about 4 inches long, shorter and comparatively thicker than those of the other pole limas, and contains 4 to 5 beans, which are large, thick, white and of the best quality. **Pt. 30c; qt. 50c; pk. $3.50.**

EXTRA-EARLY JERSEY—This is an extremely early variety, ripening 2 weeks earlier than any other sort. Pods are thin and very easily opened. The vine is very productive and exceptionally hardy and vigorous. The quality of the bean, its size and beauty make it one of the best. **Pt. 30c; qt. 45c; pk. $3.00.**

BEANS—Pole

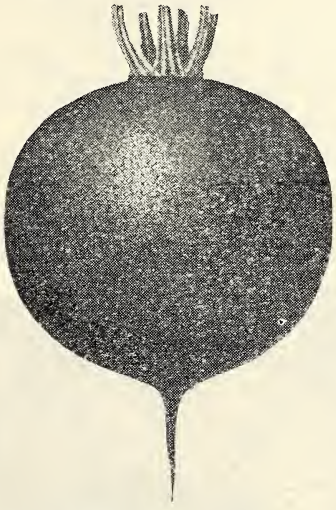
LAZY WIFE POLE BEANS—As this can be used as a shell or green bean, makes it very valuable for every home gardener as well as the market gardener. Pods are large and mealy; ripens early and very prolific. **Pt. 25c; qt. 40c; pk. $3.00.**

KENTUCKY WONDER—Vine vigorous, climbing well and very productive; dry beans, long, oval, dun-colored; green pod, 9 and 10 inches long. **Pt. 25c; qt. 40c; pk. $3.00.**

BEETS

CULTURE—The soil best suited for Beet culture is that which is rather light and well enriched. Sow in drills 1 foot apart and 1 inch deep, as early as the ground can be worked. When the plants are large enough thin out to 4 inches apart in rows. One ounce of seed will sow 100 feet of drill. 6 to 8 lbs. to an acre.

LEXINGTON MARKET BEAUTY—The best of the larger sorts. It succeeds equally well at all seasons; the tops make an upright growth, thus allowing of planting in close rows, which is a valuable feature where space in the garden is limited. The quality is excellent tender, sweet and quite free from tough fibre. The color is most attractive, being a deep blood red. The root is somewhat globe shape. For the trucker or market gardener it cannot be beaten. It is also the best for canning on account of its excellent flavor. **Pkt. 10c; oz. 20c; ¼ lb. 40c; lb. $1.25.**

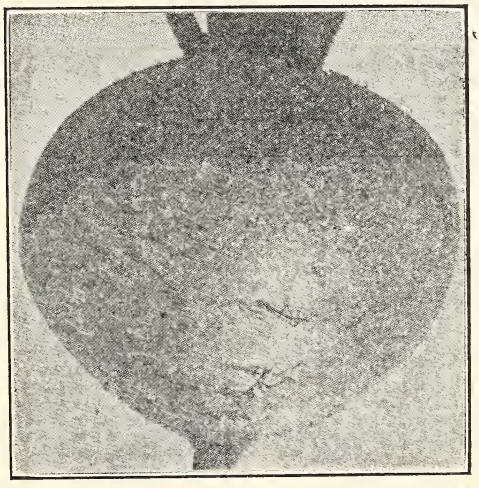


Lexington Market Beauty

DETROIT DARK RED—The uniformity of size, shape and fine appearance puts this variety at once among the leaders of this most desirable of all vegetables. Tops small and upright, admitting of close planting. Roots medium in size, globular or oval and very smooth; skin a dark blood red; flesh deep bright red, zoned with a lighter shade, fine-grained, crisp, tender and sweet, remaining so long after many sorts become woody. This is certainly a market gardener's beet. **Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. $1.00.**

EARLY WONDER—Its qualities are extra early, dark red color, fineness of shape and small top. One of the most attractive varieties grown, and is especially desirable for hotbeds on account of its small top and close-growing habit. **Pkt. 10c; oz. 20c; ¼ lb. 40c; lb. $1.00.**

CROSBY'S EGYPTIAN—A carefully selected strain of Egyptian, as early as the original, but larger, thicker, smoother and of better quality. Flesh deep blood red. It is a rapid grower, attaining a usable size quicker than any other variety, and does not become woody with age. **Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. $1.00.**



Detroit Dark Red Beet

MAMMOTH LONG RED MANGEL—This is an enormously productive variety, yielding from 50 to 70 tons to the acre, a single root often weighing from 20 to 40 pounds. It is the best long red Mangel. **Pkt. 10c; oz. 15c; ¼ lb. 20c; lb. 60c; 5 lbs. $2.50.**

GOLDEN TANKARD MANGEL—The best long yellow Mangel in cultivation. Relished by milch cows and sheep. Maturing earlier than other larger sorts. **Pt. 10c; oz. 15c; ¼ lb. 20c; lb. 60c; 5 lbs. $2.50.**

Plant the "Wisdom" Tomato—See Page 23

A Field of W. D. Co.'s Early Jersey Wakefield Cabbage on the Farm of Fred. M. Hintze, Colgate, Md.

CABBAGE

(German, Kohl; French, Chou; Spanish, Berza)

The requisites for complete success with Cabbage are: First, good seed. (In this crop the quality of the seed used is of the greatest importance; no satisfactory results can possibly be obtained when poor seed is planted.) Second, rich, well-prepared ground. (A heavy, moist and rich loam is most suitable.) Third, frequent and thorough cultivation. The ground should be highly manured and worked deep. Our Cabbage Seeds are American-grown, and we are certain that better seed could not be obtained, as they are grown from specially selected seed stock, and are not simply strains of other varieties, but true and distinct varieties. One ounce of seed to 100 yards of row.

EARLY JERSEY WAKEFIELD—The earliest and surest heading of first early Cabbage. Most gardeners depend upon it for the bulk of their extra-early crop. Its exceeding hardiness, not only to resist cold, but other unfavorable conditions, insures the greatest likelihood of profitable and satisfactory results. Our stock is grown and selected with the greatest care; there is none better and there are few as good. Plant compact, with few outer leaves, which are smooth and thick. Heads of medium size, solid, uniformly pointed and of excellent quality. The habit of growth and hardiness make it most desirable for early planting. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

W. D. Co.'s GOLDEN ACRE—This variety is of recent introduction, extremely early flat head. It matures much earlier than Copenhagen Market and heads much larger and more compact. Does not crack as easily. Few outer leaves, allowing closer planting. Matures in 82 days, making very solid heads, has done splendidly under dry weather conditions. Our strains of this variety are very uniform and can highly recommend it to the market gardeners. **Pkt. 25c; oz. 50c; ¼ lb. $1.50; lb. $5.00.**

PREMIUM FLAT DUTCH—This variety of late Cabbage is a stand rd in all sections for Winter use. It makes a large, solid head, which keeps long without bursting, and is adapted to a more varied climate than probably any other variety. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

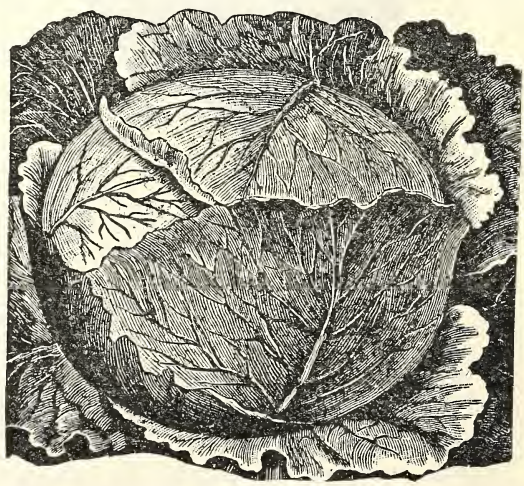
ALL SEASONS—American grown. This forms a fine larg head, of superior quality, nearly as early as the Early Summer. Suitable for planting at any season. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

CHARLESTON, or Large Wakefield—A strain in which the plant is larger and a little later than Early Jersey Wakefield, the head being fully as solid, but less pointed and considerably larger. Leaves rather large, smooth and comparatively thick. Exceedingly hardy, and on account of its earliness and size of head, with market gardeners and shippers it is deservedly a very popular sort to follow Jersey Wakefield. The seed we offer can be depended on to produce uniformly fine, marketable heads. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

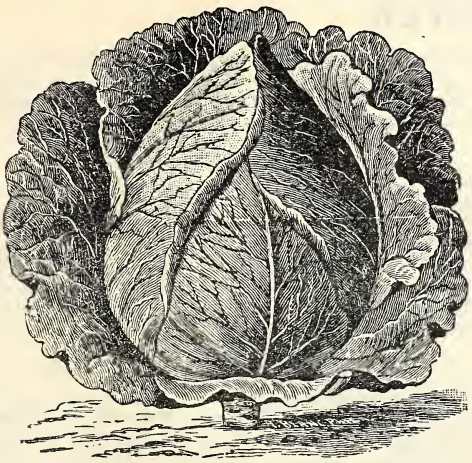
COPENHAGEN MARKET—Very fine, nearly as early as Jersey Wakefield; stem short, heads large, round and solid, with few outer leaves of an upright growth. Our stock of this popular variety is very early uniform and dependable. **Pkt. 10c; oz. 25c; ¼ lb. 80c; lb. $3.00.**

SUCCESSION—Very popular with the market gardener, producing enormous, uniform heads, and matures a few days later than Early Summer. **Pkt. 10c; oz. 25c; ¼ lb. 80c; lb. $2.75.**

EARLY FLAT DUTCH—Very compact grower, with a medium-size, roundish, flat head, which is always solid. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.50.**



Premium Flat Dutch



Charleston, or Large Wakefield Cabbage

PERFECTION DRUMHEAD SAVOY—This is the hardest heading and best all-round Savoy. Heads beautifully blanched and of the finest flavor. **Pkt. 10c; oz. 25c; ¼ lb. 90c; lb. $3.00.**

ALL HEAD—The largest of the early Cabbages, being roundish flat and very solid. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

RED ROCK—While late in maturing, this is the largest heading of all deep red varieties. **Pkt. 10c; oz. 30c; ¼ lb. $1.00.**

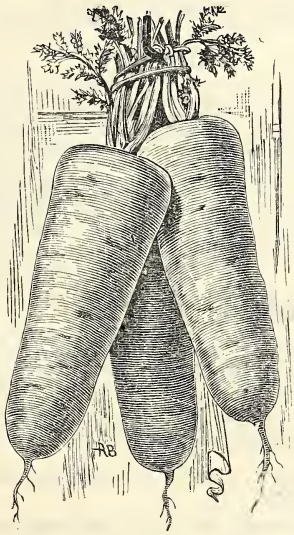
BLACK LEG OF CABBAGE

Compare the root system of the healthy plant on the right with the diseased on the left from which the roots have rotted away. **This can be prevented by the use of SEMESAN.** See Page 46.

GEORGIA COLLARDS—Called the Cabbage Collard on account of its close bunching growth. The plant produces center leaves generally perfectly white, though sometimes dashed with pink. It is a very delicate vegetable and of the finest quality. **Pkt. 10c; oz. 15c; ¼ lb. 20c; lb. 65c.**

CARROT

CULTURE—While a sandy loam, made rich by manuring the previous year, is the best soil for the Carrot, any good land, if thoroughly and deeply worked, will produce satisfactory crops. It is advisable to sow as early in the Spring as the ground is fit to work, though good crops may be grown from sowings as late as June 15. For table use, sow the smaller kinds early in rows 16 to 18 inches apart. For field culture, sow the drills 18 to 24 inches apart, using from 1½ to 3 pounds of seed to the acre. Cover ½ to 1 inch deep. One ounce of seed to 100 feet of row.



Danvers Half Long

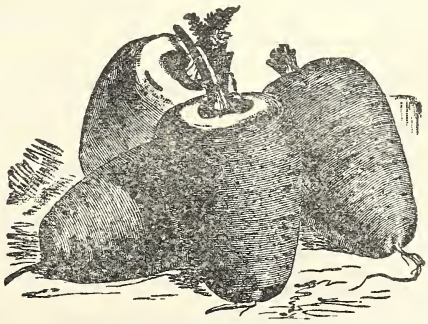
DANVERS—A half-long orange carrot, grown largely on account of its great productiveness and adaptability to all classes of soil. Tops of medium size. Roots of medium length, 6 to 8 inches long, tapering uniformly to a blunt point. Flesh deep orange, crisp and tender. Although the roots of this variety are comparatively short, they produce as large a bulk as the longer field sorts and are more easily harvested. **Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. $1.00.**

W. D. CO.'S CORELESS—Tops of medium size; roots cylindrical, smooth, bright orange; flesh orange, becoming yellow in center, but with no distinct core. One of the handsomest of the medium size sorts; excellent for the market gardener or home garden. **Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. $1.00.**

CHANTENAY, or PRIDE OF THE MARKET—Very productive, medium early and of excellent quality. Tops medium-sized; necks small. Roots thick, 5¾ to 6 inches in length, uniformly half-long or stump-rooted, but tapering slightly; smooth, deep orange color. Flesh very crisp and tender. Although a medium-early sort, the roots are suitable for use nearly as early as any. One of the best in quality for the market and home garden, while its great productiveness and the ease with which it can be harvested make it very desirable as a field sort. **Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. $1.00.**

IMPROVED LONG ORANGE—The roots of the strain we offer are very deep orange, long and comparatively thick, often 12 inches in length and 3 inches in diameter at the crown, tapering regularly to a point. Tops small for the size of the root. Suitable for table use as well as stock feeding, combining great productiveness with uniform shape and fine-grained, sweet flesh. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

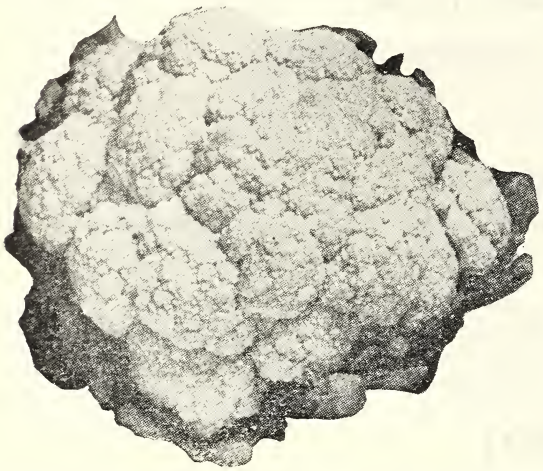
GUERANDE, or OX HEART—Especially desirable for soil so hard and stiff that long-rooted sorts would not thrive in it. Tops comparatively small. Roots 4 to 5 inches long, very thick, ending abruptly in a small tap root. Flesh bright orange, fine-grained and sweet. When young the roots are excellent for table use, and when matured are equally good for stock feeding. **Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. $1.00.**



Guerande, or Ox Heart

CAULIFLOWER

CULTURE—For Spring and early Summer crop, sow in March or early in April in hotbed and transplant in cold frame when sufficiently large to handle. As soon as danger of hard freezing is over set in open ground in rows 2½ feet apart and 18 inches apart in the row. The plants will endure a light frost. The soil for Cauliflower should be like that for cabbage, but it is better if made richer. One ounce will produce 1,500 plants.



EXTRA-EARLY SNOWBALL—Unquestionably the earliest maturing strain of the true short-leaved Snowball type of Cauliflower. Admirably adapted for forcing or Wintering over for early crop, and the most popular sort for these purposes, also one of the best sorts for late Summer and Fall crop. The plants are compact, with few short outside leaves, and are well suited for close planting. The heads are of medium to large size, solid, compact, round, very white and curdlike, and are developed earlier than those of any other sort. **Pkts. 25c and 50c; oz. $2.50; Postpaid.**

DROUGHT-RESISTING—Large, white solid heads, maturing a little later than the Snowball. The best for hot, dry weather. **Pkts. 25c and 50c; oz. $2.50; Postpaid.**

EARLY PARIS—An excellent sort for early or late use. **Pkt. 25c; oz. $1.75; Postpaid.**

EXTRA-EARLY DWARF ERFURT—A remarkably sure-heading early Cauliflower. It is of dwarf habit with short outside leaves. **Pkts. 25c and 50c; oz. $2.00; Postpaid.**

CRESS

CURLED, or PEPPER GRASS—This small salad is much used with lettuce, to the flavor of which its warm, pungent taste makes a most agreeable addition. **Pkt. 10c; oz. 15c; ¼ lb. 35c; Postpaid.**

WATER CRESS—Highly esteemed as a salad during the Spring and Fall, and as a garnish for meats during the Winter. Seed may be started readily in pans or boxes of very moist earth, and the young plants transplanted to shallow water. **Pkt. 10c; oz. 40c; ¼ lb. $1.25; Postpaid.**

CHIVES
(German, Schnittlauch)

This popular kitchen garden plant is indispensible for flavoring certain dishes. It imparts a mild onion taste, not, however, to such an extent as to render it objectionable. The plants are hardy and will last for years. Don't cut the plant too close when gathering. If desired for Winter use, lift the plant in a pot or box and place in a sunny window in the kitchen. **Pkt. 10c; oz. 25c; Postpaid.**

CHICKORY

WITLOOF OR FRENCH ENDIVE—Grown for its use as a salad, the blanched head resembling cos lettuce in appearance. Eaten raw or as a salad, also sometimes cooked like Endive. **Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. $1.00.**

CORN SALAD

A favorite salad plant and very hardy. Sow in August or September, and protect with leaves during Winter. It can be gathered in the Spring very early. Sown in April, it is soon ready for use. The leaves are sometimes boiled and served as spinach. Three ounces of seed to 100 feet of row. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

CHERVIL

An aromatic plant, used extensively in Europe as a salad seasoner. It adds a flavor that is entirely its own. When chopped fine and scattered on buttered potatoes it is a rare treat. American gardeners should become familiar with this, as they are missing one of the best things that grow. Sow it in a row like parsley, which it somewhat resembles. For a continuous crop, sow every 2 weeks. If one has heated frames or a greenhouse, it can be cut 4 or 5 weeks after sowing. One ounce will sow a row 25 feet long. **Pkt. 10c; oz. 35c; ¼ lb. $1.00; Postpaid.**

PLANTS--Vegetable

We grow each year thousands of vegetable plants of all kinds, we furnishing the seed stock, thereby knowing the true varieties of each. These are looked after with the utmost care, and in shipping are packed in moss, in strong cases, so we can guarantee safe delivery to our customers. Our list includes the following:

BEET—Eclipse, Detroit Dark Red, Crosby Egyptian Blood Turnip and Egyptian Flat. **50c per 100; $4.00 per 1,000.** Special price on larger quantities.

CABBAGE—Early Jersey Wakefield, Charleston Wakefield, Premium Flat Dutch, Early York, Succession, All Seasons, Drumhead Savoy and All-Head Early. **50c per 100; $4.00 per 1,000.**

CELERY—Golden Heart, Winter Queen, and Golden Self-Blanching. **$1.00 per 100; $6.00 per 1,000.**

EGGPLANT—New York Improved, Black Beauty and Baltimore. Pot grown, **5c each; 50c per dozen; $4.50 per 100.**

KOHL-RABI—75c per 100; $6.00 per 1,000.

LETTUCE—All varieties. **50c per 100; $4.00 per 1,000.**

BRUSSELS SPROUTS—75c per 100; $6.00 per 1000.

CAULIFLOWER—$1.50 per 100.

SAGE—For flavoring (potted plants only). **10c each; $1.00 per dozen.**

PARSLEY—For Fall or Spring planting. Strong, healthy roots. **$1.00 per 100; $5.00 per 1,000.**

PEPPERS—Bull Nose, Sweet, Mountain, Ruby King and other varieties. **$1.50 per 100.**

SWEET POTATOES—All varieties. **60c per 100; $4.00 per 1,000.**

TOMATO—Seed bed plants, **50c per 100; $4.50 per 1,000.** Field grown, **40c per 100; $3.00 per 1,000.** Special price quoted on larger quantities.

Prices above include such varieties as Bonnie Best, Red Rock, Greater Baltimore, New Stone, Brinton's Best, My Maryland, Paragon, Matchless, Chalk's Jewel, Beauty, and New Queen.

"WISDOM" and KELLY RED POTTED PLANTS, 5c each; 50c per dozen. Hot-bed plants, **75c** per 100; **$5.00 per 1,000.** Field grown, **60c per 100; $4.00 per 1,000.**

NOTICE—Plants will not be forwarded C. O. D. Plants are not quoted by express prepaid; the customer pays express charges, and unless otherwise instructed, plants will be forwarded by express. Cash must accompany all orders for plants.

CELERY

(German, Sellerie; French, Celeri; Spanish, Apio)

CULTURE—Sow in hotbeds in March or in open ground in April. See that no weeds infest the seed bed When 3 inches high transplant in a bed outdoors in rows 3 inches apart each way; let them remain here until July, when they should be planted where they are to mature, in rows 3 feet apart, 6 inches apart in the row. One ounce of seed will produce 2,000 plants.

GOLDEN PLUME—This variety comes in for use at Christmas, and keeps well into the Spring. Large heavy stalks and very nutty. The heart or inner stalks are a rich golden yellow. Easy to blanch a good keeper and always of the crisp, brittle and nutty quality so much desired. **Pkt. 25c; ½ oz. $1.50; 1 oz. $2.75.**

EMPEROR—A very special strain of late keeping Celery for winter use. Of dwarf type averaging 18 inches in height, with thick white stalks and large, solid, pale yellow heart. Very crisp, with no stringiness, and of splendid flavor. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

WHITE PLUME—It is the earliest Celery in cultivation. It is distinct from Golden Self-Blanching in being taller in growth, more slender in stalk, and branches to a pure snowy whiteness. It is a valuable market sort on account of its extreme earliness, but is not as good a keeper nor has it so fine a flavor as the Golden Self-Blanching. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

WINTER QUEEN—A medium-tall, solid variety; will retain its qualities long through the Winter. The heart is very full and large. **Pkt. 10c; oz. 20c; ¼ lb. 75c; lb. $2.50.**

COLUMBIA—An exceptionally fine, early variety, is of medium height, but very stocky. Stalks are thick, almost round, are of a rich yellow color, and its fine flavor and crispness will please the most critical. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

GOLDEN SELF-BLANCHING—One of the earliest and most productive sorts. The beautiful golden-colored stalks attain a height of 18 inches, which during the growing period are never pithy; of excellent flavor, requiring no artificial blanching process. Ready for use in October, but may be kept for early Winter use. **Pkt. 10c; oz. 25c; ¼ lb. 90c; lb. $3.00.**

HENDERSON'S EASY BLANCHING—Excels in the qualities that give self-blanching celeries their value. It bleaches earlier and quicker than any of this class; it is the longest keeping variety grown (if put away green), excelling in this respect every other sort. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

EXTRA-SELECT FRENCH GOLDEN SELF-BLANCHING

Our seed of this variety comes to us every season direct from the originator in France, it is unexcelled and absolutely reliable and our rapidly increasing trade is abundant evidence of its high quality. It is now the leading sort on all markets as an early Celery. For market use it is preferred to White Plume, because it does not wilt so soon, and its rich yellow color is very attractive. The stalks are heavier, of a fine nutty flavor, attains a good size, and it comes into market almost as soon as any other sort. It is of dwarf, compact habit and blanches readily. **Pkt. 25c; oz. $1.00; ¼ lb. $3.25; lb. $12.00.**

CELERIAC

Grown extensively for the roots, which are turnip-shaped, very smooth, tender and marrowlike.

LARGE SMOOTH PRAGUE—This is unquestionably the largest and best Celeriac in existence. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

CELERY PLANTS—(See page 8.)

SWEET or SUGAR CORN

CULTURE—Sugar Corn can be raised on any good, ordinary soil if it is deeply and well worked before planting. Give frequent and thorough but shallow cultivation until the tassels appear. Plant in rows about 3 or 4 feet apart and about 3 feet apart in the row. Leave not more than 3 plants to the hill. It can be planted from first of May to last of July for a succession of crop. Sow about 8 qts. to an acre.

ADAM'S EXTRA EARLY—Pure white, medium-sized ears. Not a sugar corn. Planted extensively by market gardeners, as it matures in about 65 days after germination. **Pt. 15c; qt. 25c; pk. $1.25; bu. $4.50.**

ADAM'S EARLY—Pure white, ears a trifle larger than Adam's Extra Early. Matures about 10 days later. **Pt. 15c; qt. 25c; pk. $1.25; bu. $4.50.**

EARLY SHEFFIELD—This i one of the standard old varieties that has become wonderfully popular, both in quality and yield it is sure to delight all lovers of choice early SweetCorn. **Pt. 20c; qt. 30c; pk. $1.75; bu. $6.00.**

PREMO—Ears from 5 to 7 inches long and of fine shape for a first sort. We confidently recommend it to all gardeners as its earliness and table quality will speedily bring it into favor. **Pt. 20c; qt. 30c; pk. $1.75; bu. $6.25.**

EARLY EVERGREEN—A fine new sort; identical in flavor, shape and size of grain with Stowell's Evergreen, but about 10 days earlier. The ears grow about 9 inches long, are mostly 12-rowed, and remain tender a remarkably long time. It is a splendid sort for truckers and private gardeners, as it furnishes a succession to the second early sorts. **Pt. 20c; qt. 30c; pk. $1.75; bu. $6.00.**

GOLDEN CREAM—A cross of Country Gentleman and Golden Bantam, taking on the character of the former variety, except in color. The ears are ready for use within 85 to 90 days after seeds were sown. Grains are long and pointed, rich cream color when ready, but turn to light golden-yellow when cooked. Stalks make a healthy, rapid growth, producing an average of three ears each. **Pt. 25c; qt. 40c; pk. $2.25.**

GOLDEN GIANT—As its name implies this is the largest of the yellow sugar varieties, the ears measuring up to 8 inches long. The cob is of small diameter, and contains twelve to eighteen rows of long, thick grains which cover the entire surface and are deep orange in color, extremely juicy and sweet. **Pt. 25c; qt. 40c; pk. $2.25.**

GOLDEN BANTAM—This is a Sweet Corn of most exquisite quality, which, when ready to use, is of a bright golden yellow color. It looks rich, and it is rich, and no mistake. It can be planted very early, as it is hardy as the Extra-Early Adam's. The small stalks can grow very closely together in the row and will produce 2 to 3 ears each. **Pt. 25c; qt. 40c; pk. $2.00.**

BLACK MEXICAN—Very sweet, sugary flavor Ears about 7 inches long. Color black. **Pt. 25c; qt. 40c;.**

NINETY-DAY RED COB—This sort, while not a sugar corn, is planted almost exclusively as a table corn. It matures in 90 days, and if weather conditions are just right, will often be ready to cut in 80 to 85 days. Cob red, ears large, grain large, white. **Pt. 15c; qt. 25c; pk. $1.25; bu. $4.50.**

COUNTRY GENTLEMAN—The ears are somewhat smaller and less showy than the coarser varieties, but for private family use, where quality is preferred to size, it has no equal. The cob is very small, giving great depth to the grain. Matures about the same time as Stowell's Evergreen. **Pt. 20c; qt. 30c; pk. $1.75; bu. $6.00.**

STOWELL'S EVERGREEN—The most popular of all. If planted at the same time with earlier kinds will keep the table supplied until October. It is hardy and productive, very tender and sugary, remaining a long time in a fresh condition for cooking. In fact, it is so well known that it needs no further description. **Pt. 20c; qt. 30c; pk. $1.75; bu. $6.00.**

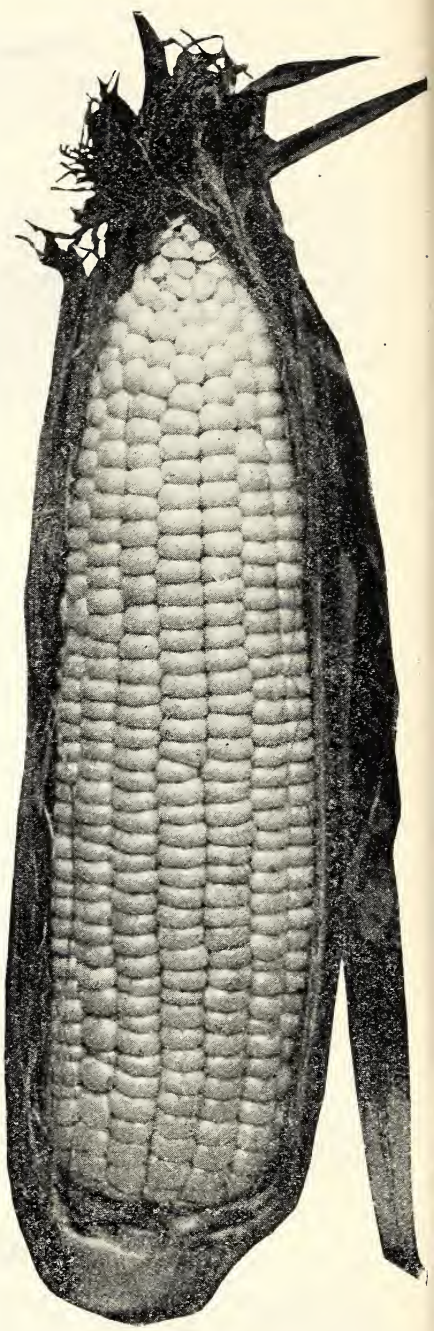
EARLY CHAMPION—An excellent second-early sort, as sweet as any variety, Golden Bantam and Country Gentleman not excepted. Yields more than any other early variety; ready for use in 70 days after planting. The ears are 6 to 8 inches long, 12-rowed, and kernels pure white. Very large and deep for an early corn; grows about 5 to 6 feet high, usually with two ears to the stalk. It is superior to most other corns in quality and is a few days earlier than Minnesota. More prolific, larger ear, deeper kernels. For home use and when dried it is remarkably sweet and tender. **Pt. 20c; qt. 30c; pk. $1.75; bu. $6.50.**

ZIG-ZAG EVERGREEN—This fine new strain possesses the distinct characteristics which have made Stowell's Evergreen so deservedly the favorite for main crop, but produces ears fit to use from 1 week to 10 days earlier. **Pt. 20c; qt. 30c; pk. $1.75; bu. $6.00.**

HOWLING MOB—A big-eared early corn with the sweet flavor of the late varieties; ears 7 to 9 inches long; usually two pearly white ears to the stalk; the shuck extends well over the tip and protects it from the green worm so destructive to early sweet corns. **Pt. 20c; qt. 30c; pk. $1.75; bu. $6.00.**

WHITE EVERGREEN—This is a high-bred white-type Stowell's Evergreen. It has been developed by careful work, only the finest white-eared product being saved and selected each season. The stalks are of strong vigorous growth, 6 to 7 feet high. **Pt. 20c; qt. 30c; pk. $1.75; bu. $6.00.**

GOLDEN QUEEN POP CORN—For planting or popping. **Lb. 15c; 10 lbs. $1.00.**



Stowell's Evergreen

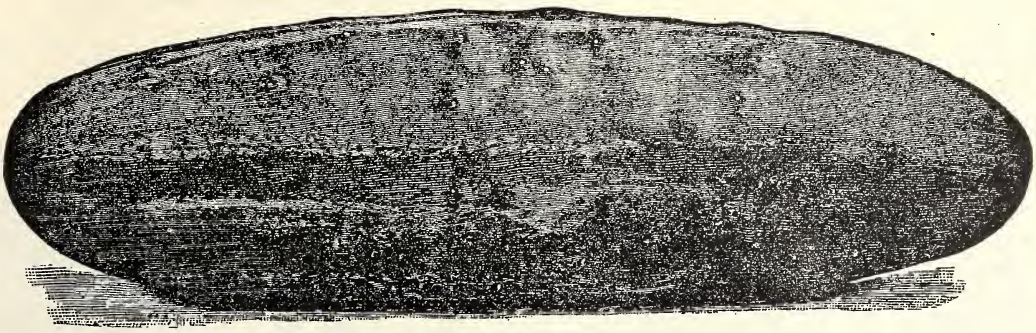
We make every effort to procure, and have grown for us, the very best Sugar Corn Seed Stock, paying the strictest attention to the types of the different varieties, time and maturity, length of ears, color of grain, sweetness, etc., and can assure the buyer corn that is absolutely true to name and of excellent germinating quality. However, no matter how well sugar corn has been selected and cured, if left in bulk will gather moisture and spoil. In order to prevent this we would advise our customers to take it out of bag or package as soon as received and spread in a warm dry place.

All Prices Subject to Change Without Notice

CUCUMBER

(German, Gurken; French, Coucombre; Spanish, Pepino)

CULTURE—Cucumbers succeed best in rich loamy soil. As soon as the weather becomes warm and settled, plant in hills 4 to 6 feet apart each way, with 10 to 12 seeds in a hill; cover ½ inch deep. Air-slaked lime sprinkled on the plants every few days as soon as they are up will protect them from the striped beetle. When 3 or 4 inches high, thin out plants, leaving 3 or 4 of the strongest to each hill. The fruit should be picked when large enough otherwise it destroys the productiveness. One ounce to 50 hills; 2 pounds per acre.



W. D. Co.'s O. K. Cucumber

W. D. CO.'S O. K.—In this variety we have secured the finest strain (even exceeding the Klondike, or White Spines) that has ever been grown. Our grower in Colorado, whose specialties are Cucumbers and Cantaloupes, says: "It is the Cucumber par excellence." Early, producing a very abundant crop of fruit, 9 to 10 inches long. The flesh is thick; seed cavity relatively small, with few seeds; color rich dark green, which does not fade nor turn yellow when shipped a long distance. It is tender and crisp, making it fine for slicing. The fruit is slightly longer than either the "Klondike, or White Spine," more cylindrical in shape. A remarkable feature of this variety is the strong growth of vines which enables it to withstand blight and bring the fruits to their full size and perfection, a very important quality, which will appeal to both trucker and home gardener. **Pkt. 10c; oz. 15c; ¼ lb. 40c; lb. $1.25.**

KLONDIKE—This is a true and distinct sort, not to be compared with the White Spine. It is entirely different, in that it holds its greenish color longer, is earlier and has a much better appearance. It is the best for truckers as well as for the home garden. One trucker in Anne Arundel County, Md., says: "The best crop of Cucumbers I ever had," and we can say that this is the sentiment of all who have tried this wonderful sort. **Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. $1.00.**

IMPROVED LONG GREEN—Of excellent quality, dark green, firm and crisp. Very popular with the market gardeners. A standard pickling sort. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 90c.**

SURE GREEN—This is one of the most productive sorts. Fruit can be picked throughout the entire season. The vine is hardy and will continue to flower and bear fruit until killed by frost. Very early. **Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. $1.00.**

ARLINGTON WHITE SPINE—This strain of White Spine has been improved by careful selection. Rich green color, and a very prolific bearer. **Pkt. 10c; oz. 15c; ¼ lb. .25c; lb. 90c.**

EARLY GREEN PROLIFIC—A very productive variety, having fruits of good length and handsome form. Desirable for producing pickles of medium size and of fine quality when sliced for the table. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 90c.**

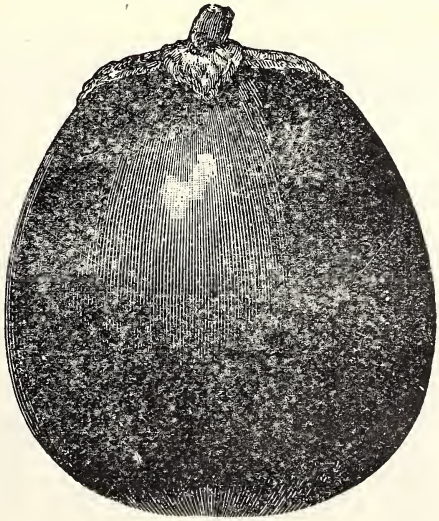
EARLY FORTUNE—The finest type of White Spine yet produced. Early, very productive and disease-resistant; fruits nine inches long, slightly tapering; flesh white, very firm and crisp, with very few seeds; color rich, dark green, which does not fade when shipped a long distance. **Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. $1.00.**

SMALL GHERKIN (for Pickles)—A very small, oval, prickly fruited sort, quite distinct from all others and grown exclusively for pickles. It is the smallest of all the varieties, and should always be picked when young and tender. Seed distinctly smaller than other Cucumbers, and is slow to germinate, requiring usually from 2 to 3 weeks. **Pkt. 10c; oz. 25c.**

EGGPLANT

(German, Fierpflauze; French, Aubergino; Spanish, Bereugena)

CULTURE—Eggplant seed germinates slowly and should be started in hotbed, for in this, as in all subtropical plants, it is of importance to secure a rapid and continuous growth from the first, the plants never recovering from a check received when young. When the plants have formed 2 rough leaves, transplant to 3 or 4 inches apart. When all danger, not only of frost, but from cold nights is past, harden off the plants by gradual exposure to the sun and air, and decreasing the supply of water; then transplant to the open ground, setting the plants 2½ feet apart. One ounce will produce about 1,000 plants.



BLACK BEAUTY—Fruits large, symmetrical in shape and uniformly of a rich dark purple color, which it holds an exceptionally long time, making the variety very desirable for the market. Fruit matures a little earlier than our Improved Large Purple, but are usually not quite as large. **Pkt. 10c; oz. 40c; ¼ lb. $1.25.**

ENDIVE

(German, Endive; French, Chicoree; Spanish, Enoiuia o Escarold)

CULTURE—Endive is an excellent Autumn and Winter salad. Sow seed late in the Spring, or even as late as July, in shallow drills, 15 inches apart, and when plants are strong thin out to about a foot apart. To blanch, gather up the outer leaves over the center of the plant and tie them together at their tips. Sow 1 ounce to 100 feet of drill.

GREEN CURLED—The hardiest variety. Leaves dark green, finely cut; easily blanched to a fine white. **Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. $1.25.**

BROAD-LEAVED BATAVIAN—Leaves large, broad, slightly curled. Tie up for blanching. **Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. $1.25.**

KALE

(German, Blaetter-Kohn: French Chou Vert; Spanish, Breton)

Extensively grown in this locality and also in the South during the Fall, Winter and Spring. The plant is more hardy than cabbage, and makes excellent greens for Winter and Spring use. The quality is improved rather than injured by frost. One ounce of seed will sow a drill of about 150 feet.

SIBERIAN CURLED KALE—A finely curled, spreading, low-growing variety. The leaves, when properly cooked, make a very palatable dish of greens. The plant is very hardy. The leaves are long and of an attractive, bright green color. **Pkt. 10c; ¼ lb. 15c; lb. 50c.**

SLOW-SEEDING SIBERIAN CURLED KALE—Four years ago we secured a small quantity of a very slow-seeding and extremely curly variety of Siberian Kale from a local market gardener who had been guarding it very closely for a good many years and never failed to supply the Baltimore markets with kale long after the ordinary varieties were gone and for which he received a handsome price. From this small stock we have grown a sufficient quantity to supply the demand and we feel sure that the trucker or gardener who plants it will be greatly rewarded. **Pkt. 10c; oz. 15c; ¼ lb. 50c; lb. $1.50.**

TALL GREEN CURLED SCOTCH—Grows 3 or 4 feet high, bearing long, plumelike light green leaves, deeply cut, finely curled at edges. Very ornamental and so hardy that a moderately heavy frost improves rather than injures its quality. **Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. $1.00.**

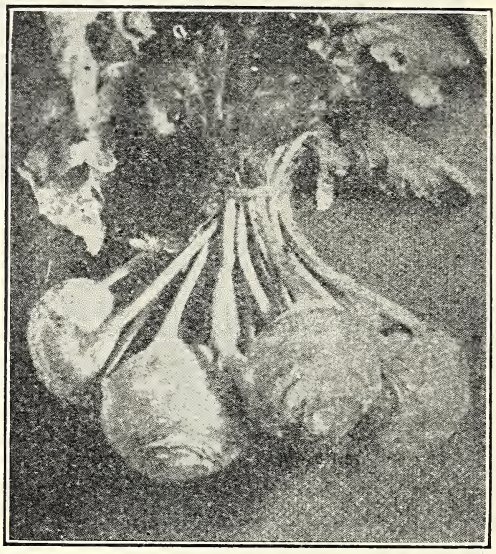
Siberian Curled Kale

DWARF CURLED SCOTCH OR NORFOLK—Plant low and compact, but with large, bright, deep green leaves, curled, cut and crimped until the whole plant resembles a bunch of moss. One of the best sorts for use, when well grown and cooked is one of the most palatable of vegetables. **Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. $1.00.**

KOHL-RABI

(German, Kohl-Rabi; French, Chou Rave; Spanish, Colde Nabo o Nabicol)

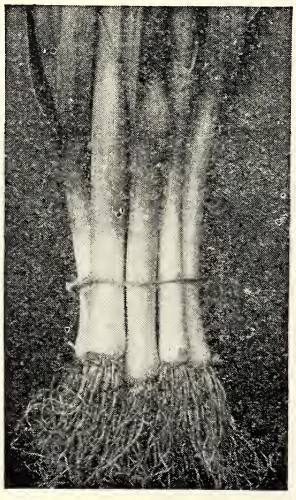
CULTURE—This is a favorite vegetable in Europe, where it is extensively grown for feeding cattle as well as for table use. The bulb is formed above the ground, and if used when young and tender, makes a most delicate dish for the table. One ounce will sow 150 feet of drill.



EARLIEST WHITE VIENNA—Greenish-white outside, with clear white flesh within. Smooth short leaf; good for forcing fine quality. **Pkt. 10c; oz. 15c; ¼ lb. 50c; lb. $1.50.**

LEEK

(German, Lauch, French, Poireau; Spanish, Puerro)



CULTURE—Sow the seed and care for the young plants same as for onions, but they need a little more room in order to develop fully. When the young plants are about the size of a goose quill transplant into a prepared bed in rows 1 foot apart and 4 or 5 inches in the rows. Set the roots deep and draw the earth to them when cultivating, so that they may be well blanched by the time they are fit for use. One ounce to 150 feet of row.

LARGE AMERICAN—Produces a large, thick stem and of mild flavor. **Pkt. 10c; oz. 20c; ¼ lb. 60c; lb. $2.00.**

LONDON FLAG—One of tne hardiest and best for Winter use. **Pkt. 10c; oz. 20c; ¼ lb. 60c; lb. $2.00.**

Plant The "Wisdom" Tomato (See Page 23)

LETTUCE

(German, Lattich; French, Laitue; Spanish, Lechuca)

CULTURE—Lettuce, to be at its best, should be grown as rapidly as possible; hence the soil should be made as rich and friable as possible by liberal manuring and thorough preparation. For Winter, sow under glass from November to February and thin out as necessary to prevent crowding. Keep a moderate heat and give all the light and air possible. For general crop, sow outdoors as early in the Spring as the ground can be worked, in drills 18 inches apart, and thin the young plants to 4 inches apart in the row. As the plants begin to crowd thin them out and use as required. In this way a much longer succession of cuttings may be had from the same ground. One ounce of seed for 2,000 plants.

WISEMAN-DOWNS CO.'S NEW IDEAL HEAD LETTUCE—We are very fortunate indeed to again secure from our French growers, a very select strain of this variety for the season of 1929, and we feel we are offering a real "Honest to Goodness" Lettuce. The plants are of quick growth, practically all head and extremely handsome. From early Spring plantings in the open ground they grow quickly to a diameter of 8 to 9 inches, with the broad, light green outer leaves folding closely about the round solid head. It is one of the best heat-resisting lettuces on the market, remaining in head without running to seed. We can highly recommend this sort for Spring or Fall planting. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

New Ideal Lettuce

ALL SEASONS—One of the best year round lettuces, suitable for planting in Spring, Summer, or Fall. Stand the heat well. Heads green, with inner leaves of golden yellow. **Pkt. 10c; oz. 20c; ¼ lb. 50c; lb. $1.50.**

GRAND RAPIDS—As a lettuce for greenhouse forcing, this variety undoubtedly stands at the head of the list, being of quick growth, hardy, little liable to rot and remaining in condition several days after being fit to cut. The plant is upright and forms a loose cluster of large, thin, bright green leaves, savoyed, finely crimped at edges. The leaves do not wilt quickly after cutting, so that the variety will stand shipping long distances better than most sorts. Very attractive and desirable for garnishing. **Pkt. 10c; oz. 20c; ¼ lb. 50c; lb. $1.75.**

SIMPSON'S EARLY CURLED (Seed White)—Leaves light green, slightly frilled and much blistered, crisp sweet and tender. Especially adapted for sowing thickly and cutting when the plants are young. **Pkts. 10c; oz. 20c; ¼ lb. 50c; lb. $1.50.**

PARIS WHITE COS (Romaine)—Cos Lettuce is distinct in having long, narrow, spoon-shaped leaves, folding into loose, sugar loaf-shaped heads, which blanch better by having the outer leaves drawn about them and tied. **Pkt. 10c; oz. 20c; ¼ lb. 60c; lb. $2.00.**

WAYAHEAD—May be grown either in the cold frame, or in open ground early in the spring, and produces good hard heads. The outer leaves fold tightly and are light green in color, while the inner leaves or heart blanch yellow. **Pkt. 10c; oz. 20c; ¼ lb. 50c; lb. $1.50.**

BIG BOSTON (Seed White)—Popular for outdoor culture; also much in demand as a compact, large-heading, forcing sort. Plants large, very hardy and vigorous. Leaves broad, comparatively smooth, but wavy at edge, thin, very hard and crisp. Color bright light green, the head slightly tinged with reddish-brown. **Pkt. 10c; oz. 20c; ¼ lb. 60c; lb. $2.00.**

Big Boston Lettuce

ICEBERG—A large, late, crisp-heading variety; heads very firm, hard and well blanched; leaves unusually broad and quite blistered and crumpled. Color medium green. **Pkt. 10c; oz. 20c; ¼ lb. 75c; lb. $2.50.**

MAY KING (Seed White)—A handsome, extremely early, compact, cabbage or heading variety, forming very firm heads of medium size and excellent quality. Color light yellowish-green, tinged with reddish-brown when mature. Inner leaves blanch rich golden yellow; very tender and buttery. **Pkt. 10c; oz. 20c; ¼ lb. 50c; lb. $1.50.**

NEW YORK or WONDERFUL—A very large, late, globular heading variety; leaves broad of thick texture, fairly blistered and crumpled, and the borders frilled; color clear dark green; quality good. Known in California and the west as "Iceberg." **Pkt. 10c; oz. 20c; ¼ lb. 75c; lb. $2.50.**

UNRIVALED—Forms large, compact, butter heads, and is slow going to seed. Similar in character to Big Boston except greener and the leaves are not tinged with brown. **Pkt. 10c; oz. 20c; ¼ lb. 60c; lb. $2.00.**

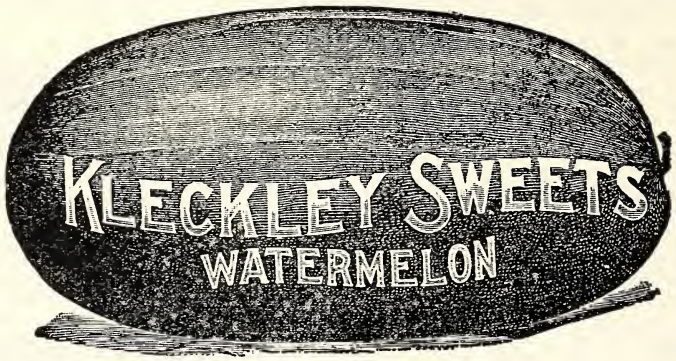
WATERMELON

(German, Wasser Melone; French, Melone d'Eau; Spanish, Zandia)

CULTURE—Watermelons require a rich sandy loam, which should be well worked. Put 10 to 12 seeds in a hill. When the plants have formed the first pair of rough leaves they should be thinned so as to leave 2 or 3 of the strongest and best to each hill. Make hills about 10 feet apart. One ounce of seed to 30 hills.

TOM WATSON—This new melon has surprised everybody by its sudden rise in popularity. Although very new, it already occupies a very prominent place in all markets and is everywhere called for. It is a long green variety, covered with a fine netting, giving it a most attractive appearance. The flesh is of most superb quality and intensely red color. The rind is thin, but hard and tough, making it an excellent market and shipping sort. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

FLORIDA FAVORITE—A standard sort. Long and of uniform size. Color a beautiful green. Flesh very red, with a taste that lingers. It has long been a favorite with the truckers and market gardeners **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**



KLECKLY SWEETS—Well does it deserve its name. It has a sweetness peculiarly all its own. The skin is a rich dark green; the flesh bright scarlet, ripening close to the rind. The melons average about 20 inches long and ripen quite early. Our strain is from the original stock, and we can recommend it very highly. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

PRESERVING CITRON, or MELON—A large-fruited variety, pure white flesh and thin rind. This is expensive when bought, yet can be grown and preserved by any energetic housewife, who will then also know it to be absolutely pure and good. It is planted like Watermelon. Red-seeded. **Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. $1.00.**

W. D. Co.'s EXCEL—We have the best strain of this new variety obtainable. It is a very great improvement over the Tom Watson, both as to size and color. One market dealer says, "It is the largest melon he ever saw." Some weighing as much as eighty pounds. The best shipping and the best market melon. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 85c.**

MUSTARD

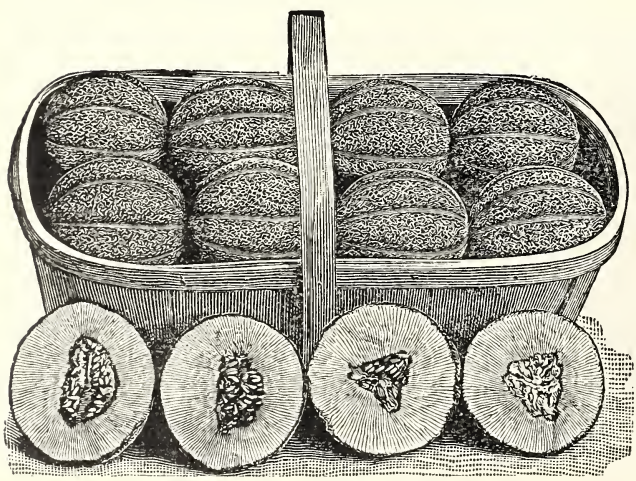
(German, Snef; French, Moutarde; Spanish, Mustazo)

FORDHOOK FANCY—A handsome, vigorous growing, mild variety, standing a long time before going to seed; leaves dark green, beautifully curled and fringed; fine for salads and garnishings; seek reddish-brown. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

SOUTHERN GIANT CURLED—Plant vigorous and hardy, of upright, spreading growth; leaves large, light green-tinged yellow, much crumpled and frilled at the edges. The popular market variety in the South; seed small, dark reddish-brown. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

MUSKMELON

(German, Melone; French, Melone Muscade; Spanish, Melone Almizcleon)



Rocky Ford Melon

CULTURE—Plant the seeds in hills 6 feet apart each way, dropping 10 to 12 seeds in a hill. After the plants begin to crowd and the striped beetles are pretty well gone, thin to 4 of the most vigorous plants in a hill. Give frequent but shallow cultivation until the plants make runners so long that this is impracticable. Rich earth for the young plants is far better than manure, but if the latter must be used, see that it is well rotted and thoroughly mixed with the soil. If the plants grow very rank, more and finer fruit will be secured by allowing the main branch to continue growing but pinch off the end of each side branch after it has one fruit set. One ounce of seed to 50 hills.

ROCKY FORD—One of the earliest and best melons grown. The vines are exceedingly healthy and vigorous, comparatively short and branching producing an enormous quantity of fruits during the season. The melons are very uniform in size and shape, being nearly round or slightly oval. Skin a rich greenish gold when fully ripe; the netting is fine and prominent. In appearance the melon is very attractive. The flesh is light green in color, very deep, ripening clear to the rind, which is very thin. In flavor it is peculiarly rich, luscious and free from stringiness. **Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. $1.00.**

Plant The "Wisdom" Tomato (See Page 23)

MUSKMELON--Continued

EXTRA-EARLY KNIGHT — Slightly larger than the "Rocky Ford," but more heavily netted. The seed cavity is small and flesh, which is green, thick and sweet, containing a high percentage of sugar. An important feature of this melon is its ability to withstand rust and blight, as it is nearly proof against either. **Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. $1.25.**

ANNEARUNDEL — Large, green-fleshed, deeply netted. A good shipping melon. **Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. $1.25.**

HONEY DEW—The melon with an appropriate name. This new melon is unlike the ordinary Muskmelon or Cantaloupe, both in appearance and flavor, the outer skin being smooth, hard and nearly white. The melons are large, round to oval in shape, extremely thick-meated and have a very small seed cavity; flesh is light green, very solid and of a rich honey-like flavor, luscious and juicy. Of good keeping qualities and a good shipper. **Pkts. 10c; oz. 20c; ¼ lb. 50c; lb. $1.50.**

THE BOTTOMLEY—This is without a doubt the best yet. We can safely say it will produce more and better fruit than any Cantaloupe on the market today. In fact, every grower of melons who has tried this sort will unhesitatingly say, "There is none better." The seed we offer is from the true stock, and must not be confounded with seeds sold at a less price by unscrupulous dealers. Grown by us under our own supervision, where it can be carefully watched, and in one of the best sections of the country for the growing of Cantaloupes, there is no reason why this should not rank as the best on the market. In quality it has no rival. From 7 to 8 days later than the Knight. The vine makes a very heavy growth, which makes it blight-resisting. Fruit very uniform in size, averaging about 7 inches in length from stem to blossom end. Very thick-meated, of a greenish color. Small seed cavity; thin rind, beautifully netted. Slightly pointed at the stem end and rather blunted at the blossom end. A prominent commission merchant who sells tons of melons each year says: "It is the best that comes to the Baltimore wholesale market, and never fails to command a higher price than any other variety." For shipping it is unexcelled. **Pkt. 10c; oz. 20c; ¼ lb. 75c; lb. $2.50.**

W. D. Co.'s Bottomley

OSAGE, or MILLER'S CREAM—A medium to large-sized melon of excellent quality. Vines vigorous and productive. The fruits are oval, dark green in color, slightly ribbed and partly covered with shallow gray netting. The flesh is salmon-colored, thick, fine-grained and highly flavored. **Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. $1.25.**

EMERALD GEM—Among the standard varieties this has long been a leader. The flesh, which is thicker than any other melon of the same shape, is a rich salmon shade, and ripens extremely close to the rind. It is exceedingly sweet and one of the melons when you once eat of it you will remember it for a long while. **Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. $1.25.**

NETTED GEM—Grows remarkably uniform; thick-meated, flesh light green in color and of fine, luscious flavor; skin green, regularly ribbed and thickly netted; very productive and extra early in ripening; will keep for nearly a week after picking, and is especially suited for shipping in baskets or crates. **Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. $1.25.**

BALTIMORE NUTMEG—Fruit uniform in size and of attractive appearance. Green flesh and very sweet flavor. An excellent shipper. **Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. $1.25.**

EARLY HACKENSACK—It is well netted, deeply ribbed, making it ideal for cutting in slices on account of its large size. The flesh is light green, very thick and ripens well to the rind. The shape is even more flat than the Emerald Gem. **Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. $1.25.**

JENNY LIND—A small, flat, very early sort, heavily netted and ribbed with green flesh, an altogether good variety to plant with others, using this for the first picking. **Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. $1.25.**

ONION SEEDS

(German, Zwibbel; French Ognon; Spanish, Cebolla)

White Silverskin

CULTURE—A strong, deep, rich and loamy soil is most suitable for this crop. Muck beds well drained to the depth of 2 feet give large yields. A black sandy loam is also excellent. The ground should be heavily dressed with well-rotted manure and plowed a moderate depth, taking a narrow furrow in order to more thoroughly mix the manure with the soil; if possible, the plowing should be done in the Fall. As early in the Spring as the ground is in working order harrow it thoroughly and make as fine and level as possible; sow thinly in drills ¼ inch deep and 14 inches apart.

WHITE SILVERSKIN—This is the most popular of all white Onions. The skin and flesh is a silvery white, mild flavor and flat shape. **Pkt. 10c; oz. 40c; ¼ lb. 80c; lb. $2.75.**

WHITE PEARL—A very popular variety for medium-early crop. Very mild in flavor; color pearly white; very large, especially if planted on good rich soil. A splendid variety for the market gardeners. Good keeping qualities and heavy yielder. **Pkt. 10c; oz. 40c; ¼ lb. 80c; lb. $2.75.**

PRIZETAKER—Flavor very mild and delicate. A very handsome Onion, of the largest size, and nearly globular in form. Skin is yellowish-brown; flesh white. If started very early in hotbeds it will produce a mammoth Onion the first season. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

Be Sure To Plant The "Wisdom" Tomato (See Page 23)

YELLOW GLOBE DANVERS—One of the most popular sorts for home or market gardens. Handsome, round, yellow Onion. A splendid keeper, and one that yields well. Can highly recommend this for growing either large or small Onions. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

LARGE RED WETHERSFIELD—This is a well-known sort. A good yielder and an excellent keeper, and where red Onions are wanted there is none better. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

ONION SETS

To raise Onion Sets from seed, use good ground, prepared as for large Onions, and sow the seed very thick in broad drills, using 40 to 60 pounds per acre. If the seed is sown thin, the bulbs will not only be too large for sets, but will not be of the right shape, and if sown thick on poor land they will be necky and bottle-shaped. Onion seed sown for Sets may be sown somewhat later than if a crop of large bulb is desired.

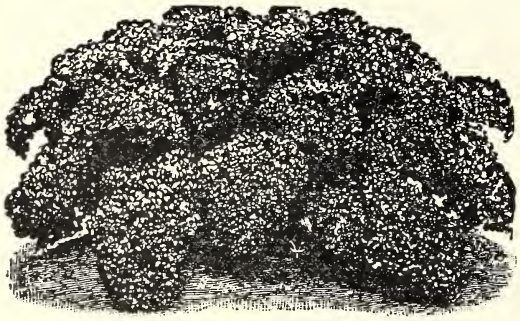
WHITE SILVERSKIN—Qt. 30c.

YELLOW DANVERS—Qt. 25c.

Owing to market changes, we cannot quote prices on larger quantities except on application.

PARSLEY

(German, Petersilie; French, Persil; Spanish, Perejil)



Parsley succeeds best on rich, mellow soil. The seed is very slow in germinating, and should be sown as early as possible in the Spring, in drills 1 to 2 feet apart, covering not more than ¼ inch with fine soil, firmly pressed down. When plants are well up thin to 4 inches apart in the row. When the plants of the curled varieties are about 3 inches high cut off all the leaves. The plant will then start a new growth of leaves, which will be brighter and better curled. Every cutting will result in improvement.

DWARF CURLED—Handsomely crimped and curled; bright green color. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

MOSS CURLED — Vigorous, compact-growing variety. Excellent for garnishing and flavoring. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

HAMBURG or ROOTED—The fleshy root resembles a parsnip and is used for flavoring soups, etc. **Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. 75c.**

OKRA, or GUMBO

(German, Essbarer; Eibisch; French, Gombaud, Spanish, Quimbombo)

Cultivated for its young seed pods, which are used in soups, stews, catsups, etc. After danger of frost is past, the ground being warm and in good condition, plant in rows about 2½ feet apart, covering with about an inch of fine soil, firmly pressed down. When about 3 inches high thin to about 1 foot apart in the row.

DWARF PROLIFIC—The pods are from 4 to 5 inches long and are very tender, slim and of a beautiful deep green color. **Pkt. 10c; oz. 15c; ¼ lb. 20c; lb. 75c.**

WHITE VELVET—Pods free from ridges and very tender. **Pkt. 10c; oz. 15c; ¼ lb. 20; lb. 75c.**

MUSHROOM SPAWN

CULTURE—Mushrooms may be grown in cellars, under benches in greenhouses or in sheds wherever the temperature of 50 degrees can be kept up during the Winter. The beds should be made from November to February, according to the time the Mushrooms are wanted, and it requires about two months for them to begin bearing. Secure fresh horse dung, free from straw and litter, and mix an equal bulk of loam from an old pasture with it. Keep this under cover taking care to turn it every day to prevent it from heating, until the pile is large enough to make a bed of the required size. Three or 4 feet wide, 8 inches deep and any length desired, are the proper proportions for a bed, but this may be varied. Prepare the mixture of loam and manure, making the bed in layers and pounding down each with the back of a spade. Leave this to heat through for a few days, and as soon as the heat subsides to 90 degrees make holes in the bed about a foot apart each way, into which put pieces of spawn 2 or 3 inches in diameter; fill up the hole with compost, and at the expiration of a week or 10 days the spawn will have thoroughly diffused itself through the bed. Spread layer of soil over the heap to the depth of 2 inches, and cover with 3 or 4 inches of hay, straw or litter. Examine bed often to see that it does not get dry. Take special care, however, when water is given that it be at a temperature of 100. One brick to a bed 6 feet square.

BEST ENGLISH MILLTRACK SPAWN—Brick, 1 lb., 25c; 10 lbs. $2.50.

PEAS

(German, Erbsen; French, Pois; Spanish, Chicaros o Ginsantes)

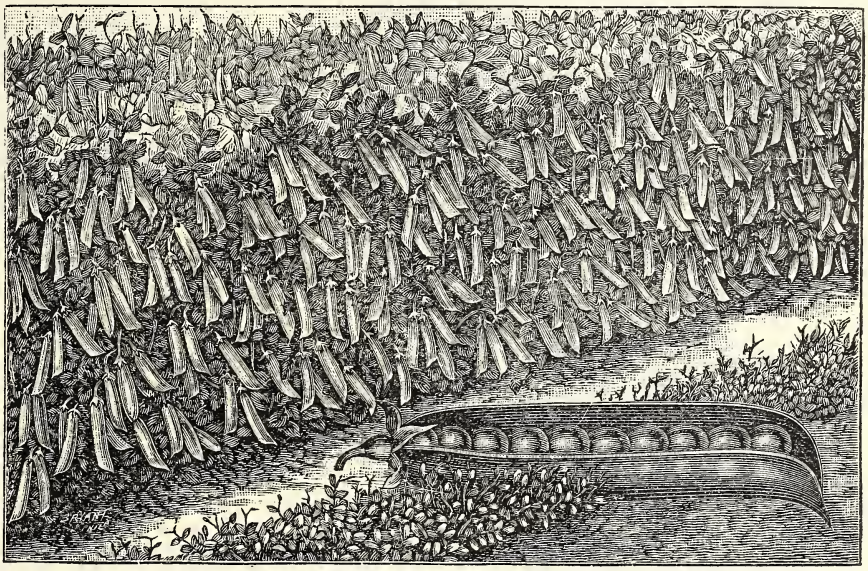
CULTURE—For early Peas the soil should be light and warm, but for general crop a moderately heavy soil is better. Fresh manure and very rich or wet, mucky soil should be avoided, as they cause a rank growth of vine at the cost of the quality of the Peas; such soil is often the cause of early sorts maturing unevenly. Sow as early as possible a few of some early variety on warm, quick soil, prepared the fall before. The general crop can be delayed until later, but we have met with better success from sowing all the varieties comparatively early, depending for succession upon selecting sorts that follow each other in maturity. The Peas will give quicker returns if covered only 1 inch deep, and where earliness is most important they may be treated in that way. Larger pods and more of them will be produced if the seed be planted in trenches 3 to 6 inches deep and covered with only 1 or 2 inches of soil. When the plants are 5 or 6 inches high fill the trench level with the surface; this will secure deep rooting, prevent mildew and prolong the bearing season. If the Peas be covered to the full depth at first, or if water be allowed to stand in trenches, they will not germinate or grow well.

EXTRA-EARLY VARIETIES

LARGE-PODDED ALASKA—Vines 2½ feet. The pods are well shaped and well filled, containing 6 to 8 Peas of a beautiful green color, both Peas and pods retaining their fresh green color longer after being picked than other kinds, this being a point of particular value when they are grown for shipping purposes. **Pt. 25c: qt. 40c; pk. $2.50.**

ALASKA—Vines 2½ ft. Seed small, smooth and bluish green in color. Unequaled evenness in growth of vine and early maturity of pods, which are filled with medium-sized, bright green Peas of good flavor. **Pt. 25c; qt. 40c; pk. $2.50.**

BOUNTIFUL—Of recent introduction. Early and very prolific; vines of even growth and bearing any number of well-filled pods, which are of a light green color, containing 6 to 8 Peas to the pod. **Pt. 25c; qt. 40c; pk. $2.50.**



W. D. Co.'s Early Bird

PEDIGREE EXTRA EARLY Introduced several years ago; has steadily increased in favor until now the truckers all want it. Early as Alaska; large pods, white seeded, very prolific. All mature at one time and can be gathered in one picking. **Pt. 25c; qt. 40c; pk. $2.50.**

PROLIFIC EARLY MARKET, or NEW LATER—The new Pea, just recently introduced, has proven to be the finest, largest and most prolific extra-early variety on the market. It is larger than the Alaska, a few days later and more prolific than any of the other sorts. Will always command a higher price in the markets because of its handsome and showy pods. It is just the Pea for the trucker and also the home garden. **Pt. 25c; qt. 40c; pk. $2.50.**

EARLY BIRD—A very early, large podded variety. Semi-wrinkled. Vines grow about 22 inches. Pods from 4 to 4½ inches long and pointed, with from 9 to 10 peas in the pod. Robust growth and a very heavy yielder. Can be sown with safety as soon as the ground can be worked. This is one of the best varieties for the market gardener and trucker. **Pt. 30c; qt. 50c; pk. $3.25.**

LARGE-PODDED SUGAR VARIETIES

THOMAS LAXTON—Closely resembling Gradus in habit, rapidity of growth, earliness of foliage; 26 to 30 inches high, and much hardier in every respect than the Gradus. Pods 4 to 4½ inches long, round and well filled. Ready to pick 52 days from planting. **Pt. 25c; qt. 40c; pk. $2.75.**

AMERICAN WONDER—Vigorous, productive vines, with a luxuriant foliage, producing the leaves on one side of the stalk, and growing from 9 to 12 inches high. On account of its dwarf habit of growth it is very desirable for private garden use. Pods are light-colored, straight, round, about 2½ inches long and blunt at the end. Fit for picking 55 days from planting. Seed is wrinkled green, medium in size and square at the ends. **Pt. 25c; qt. 40c; pk. $2.75.**

NOTT'S EXCELSIOR—Resembling Gems in habit, but more dwarf and uniform in growth. Height 12 to 17 inches, with rather light foliage. Pods are light in color, round, about 2½ inches long, blunt at the ends. Fit for picking 56 days from planting. Seed green, wrinkled, medium in size and square at the ends. **Pt. 25c; qt. 40c; pk. $2.75.**

GRADUS, or PROSPERITY—A large, wrinkled, early Pea, with a pod nearly as long as the Telephone; tender and of good quality and flavor. Very quick to germinate and mature with the other sorts. This Pea will not stand adverse conditions, however, as well as some of the other sorts, and seed must be planted after all danger of frost has passed. **Pt. 30c; qt. 50c; pk. $3.00.**

PREMIUM GEMS—Strong and vigorous in growth. Height about 15 inches; dark foliage, bearing pods on both sides of the stalk, beginning near the ground. Pods light in color and blunt at the ends. Seed is green, wrinkled and medium in size. **Pt. 25c; qt. 40c; pk. $2.75.**

LONG ISLAND MAMMOTH—Very popular with market gardeners who want a large, handsome pod of a dark green color. **Pt. 25c; qt. 40c; pk. $2.75.**

DWARF TELEPHONE—Vines 18 to 26 inches high, with rather coarse foliage; medium light green, bearing pods broad, straight and about 4 inches long. Pale green in color and well filled with peas of excellent flavor. Ready for picking from 62 to 65 days from planting. Seed pale green, large, much wrinkled. **Pt. 25c; qt. 40c; pk. $2.75.**

SUTTON'S PIONEER—One of the latest achievements in the perfection of early Peas, and we cannot speak too highly of it. Sutton's Pioneer was introduced to the gardening public several years ago, and since then the demand has grown far ahead of the supply. It is a first-early sort and very prolific. One gardener says: "I never before grew such Peas; the large, handsome pods were packed with plump, tender, rich-flavored peas." This variety presents a rich appearance while growing on account of the large number of pods on each vine. Vines reach a height of 2 feet, are very strong and do not need support unless the soil is very rich. **Pt. 25c; qt. 40c; pk. $2.75.**

STRATAGEM—A vigorous, hardy and luxuriant vine, bearing large pods, containing Peas of excellent quality. A heavy cropper. but it has a tendency to sport. Vines 20 inches. Foliage dark green. Pods 3½ inches long, straight, broad-pointed, gray-green in color. Fit for table use 56 days from planting. Seed very large, green wrinkled. **Pt. 25c; qt. 40c; pk. $2.75.**

EVERBEARING—Vigorous and bracing in habit of growth. Height 2½ to 3 feet. Pods 2¾ to 3 inches long, broad, light-colored and blunt. Fit to pick 70 days from planting. Seed green, wrinkled and large in size. **Pt. 25c; qt. 40c; pk. $2.75.**

CHAMPION OF ENGLAND—Strong and vigorous in growth, 42 to 50 inches in height. Foliage medium green. Pods 2½ to 3 inches long, blunt, medium dark green in color. Fit to pick 68 to 73 days from planting Seed large, green and very much wrinkled. **Pt. 25c; qt. 40c; pk. $2.75.**

INOCULATE THIS SEED
NITRAGIN
Restores and Maintains Soil Fertility

THE ORIGINAL SOIL INOCULATOR—The simplest and most profitable system of soil inoculation for all legumes. Enriches the soil, increases yield, hastens maturity, and saves fertilizer bills. Granular in substance; easy to mix with seed. Packed in tins and sold on convenient bushel basis; one bushel size will inoculate one bushel of any legume seed.

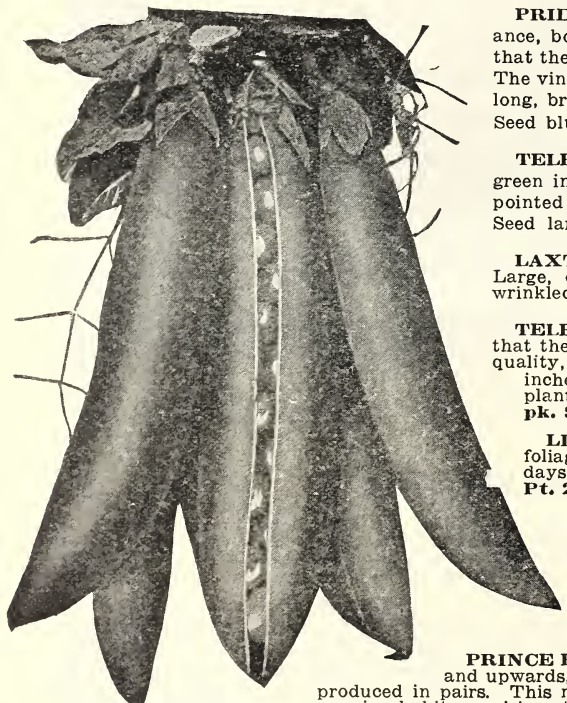
Important: When ordering always name the seed you wish to inoculate.

Prices below cover all legumes except Soy Beans and Cow Peas.

¼ bu. size inoculates	15 lbs. seed (ship. wt. 4 oz.)	$ .40
½ bu. size inoculates	30 lbs. seed (ship. wt. 6 oz.)	.60
1 bu. size inoculates	60 lbs. seed (ship. wt. 10 oz.)	1.00
5 bu. size inoculates	300 lbs. seed (ship. wt. 3 lbs.)	4.75
Garden size, peas, beans, lime beans.....		.20

POSTPAID

When ordering always name the crop you want it for.



Pride of the Market Peas

PRIDE OF THE MARKET—Of fine growth and general appearance, both vine and pod, and closely resembles the Stratagem, except that the vine is not quite so long and the pods are deeper green in color. The vine is 20 inches high. Foliage dark green color. Pods are 3½ inches long, broad and dark in color. Fit for table use 61 days from planting. Seed blue, slightly dented and large. **Pt. 25c; qt. 40c; pk. $2.75**

TELEPHONE—Vines and leaves large and coarse. Foliage light green in color. Height 40 to 50 inches. Pods 4½ inches long, broad, pointed and medium in color. Fit to pick 62 to 65 days from planting. Seed large, green and wrinkled. **Pt. 25c; qt. 40c; pk. $2.75.**

LAXTONIAN—Vine 1½ feet in height, with dark green foliage. Large, curved, dark green pods, pointed at the ends. Seed green, wrinkled, large-sized. **Pt. 25c; qt. 40c; pk. $2.75.**

TELEGRAPH—Closely resembling Telephone in all respects, except that the pods are a deeper shade of green and the Peas are of only fair quality, although the pods are of very fine appearance. Pods 4 to 4½ inches long, medium dark green, pointed. Fit to pick 65 days from planting. Seed large, blue and round, dented. **Pt. 25c; qt. 40c; pk. $2.75.**

LITTLE MARVEL—Height of vine 18 inches, with dark green foliage. Small, blunt, dark green pods. Fit for table use 53 to 55 days from planting. Seed blue-green, small-sized and wrinkled. **Pt. 25c; qt. 40c; pk. $2.75.**

INOCULATE THIS SEED
NITRAGIN
Restores and Maintains Soil Fertility

It was invented by Nobbe & Hiltner, world famous soil experts, who discovered the science of legume inoculation with nitrogen-fixing bacteria in 1896—**Twenty-eight Years Ago.**

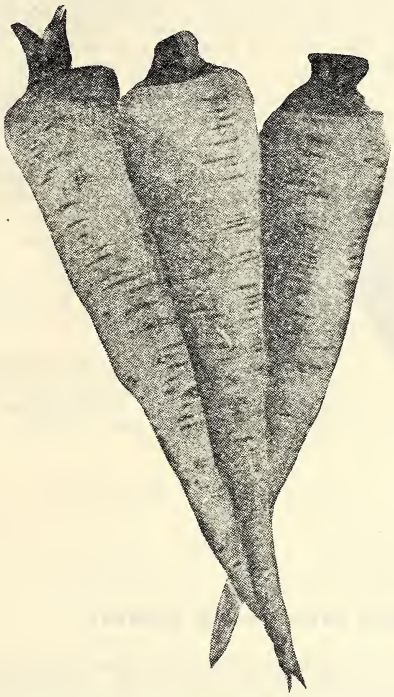
PRINCE EDWARD—This variety produces enormous pods 7 inches long and upwards, containing from 11 to 13 large dark green Peas and are mostly produced in pairs. This makes them much less tedious to pick. The plant is of strong growing habit, requiring stakes, but produces enormous crops. The pods are of unusually attractive appearance when placed on market, and are always saleable. We take great pleasure in recommending this new variety to our customers, as it is one of the most excellent quality and comes in late, after other varieties are too old. **Pt. 25c; qt. 40c; pk. $2.75.**

EDIBLE POD PEAS

MELTING SUGAR—One of the best varieties. Can be used in a green state like string beans. **Pt. 25c; qt. 40c; pk. $2.75.**

PARSNIP

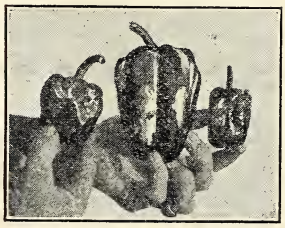
(German, Pastinake; French, Panais; Spanish, Chirivia)



Improved Hollow Crown or Guernsey

CULTURE—Parsnips are usually grown on deep, rich, sandy soil, but will make good roots on any soil which is deep, mellow and moderately rich. Fresh manure is apt to make the roots coarse and ill-shaped. As the seed is sometimes slow and uneven in growth, it should be sown as early as possible in drills 2½ feet apart; cover ½ inch deep and press the soil firmly over the seed. Give frequent cultivation, and thin the plants to 6 inches apart in the row.

IMPROVED HOLLOW CROWN, or GUERNSEY—An excellent variety for the table. Roots long, with smooth white skin, uniform in shape, tender and of the best quality. The variety is easily distinguished by the leaves growing from the depression on top or crown of the root. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**



Better Peppers With SEMESAN

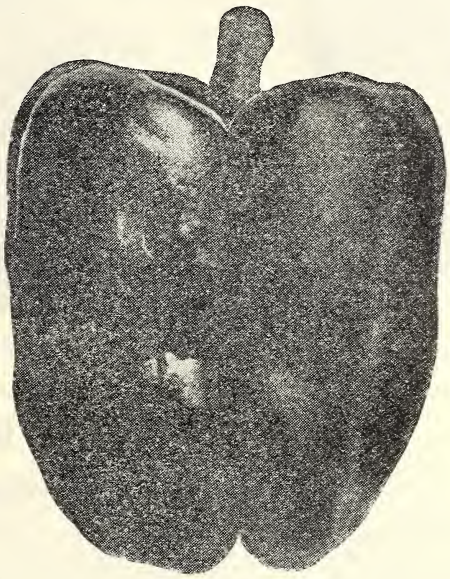
Notice how much better is the center pepper from SEMESAN-treated seed than the other two from an untreated diseased plant.

See Page 46

PEPPER

(German, Pfeffer; French, Piment; Spanish, Pimiento)

CULTURE—Peppers are most largely used for seasoning meat and vegetable dishes, also for making chow-chow and Chili sauce. The culture is the same as for Eggplant and the plants need quite as much heat to perfect them. Sow seed early in hotbed, or about middle of Spring in open seed bed, the soil being light and warm. When 3 inches high transplant in rows about 2½ feet apart and 2 feet apart in the row. Cultivate and keep free from weeds. Guano, hen dung or any other bird manure hoed into the surface soil when the plants are about 6 inches high will undoubtedly increase the product.



LARGE BELL, or BULL NOSE—Our stock of this well-known variety, sometimes called Sweet Mountain, is very superior. Plant vigorous, about 2 feet high, compact and very productive, ripening its crop uniformly and early. The fruits are large, with thick, mild flesh, of excellent quality for use in salads and mangoes or stuffed peppers. The color is deep green when fruit is young, bright crimson when ripe. **Pkt. 10c; oz. 50c; ¼ lb. $1.50.**

RUBY KING—An improved American variety, very large and attractive. The plant is about 2½ feet high, vigorous, compact and productive. The fruits are often 4 to 4½ inches long, and of deep green color when young bright red when ripe. The flesh is thick and milk-flavored. One of the best varieties for mangoes or stuffed peppers. **Pkt. 10c; oz. 40c; ¼ lb. $1.50.**

NEW CHINESE GIANT—The fruits of this variety are of monstrous size, even when put alonside such a large kind as Ruby King. The shape is more blocky than Ruby King, being almost square, or about the same diameter both ways. Color brilliant glossy scarlet. It is so immensely productive that frequently a half dozen peppers will touch one another. The habit of growth is strong and stocky, about 18 to 24 inches high. Usually 3 or 4 fruits are set first near the base, and while these are ripening a second setting is growing higher up. Flesh is thick and meaty and entirely free from any fiery flavor. **Pkt. 10c; oz. 50c; ¼ lb. $1.50.**

RED CHERRY—A second-early sort. Plant tall, bearing a profusion of round, bright red fruits, which are very pungent when ripe. A very ornamental plant when in fruit. **Pkt. 10c; oz. 30c; ¼ lb. $1.25. $4.50; Postpaid.**

RED CHILI—A late variety. Pods bright, rich red, about 2 inches long, ⅛ to ¼ inch in diameter at the base, tapering to a sharp point, and exceedingly pungent when ripe. **Pkt. 10c; oz. 30c; ¼ lb. $1.25.**

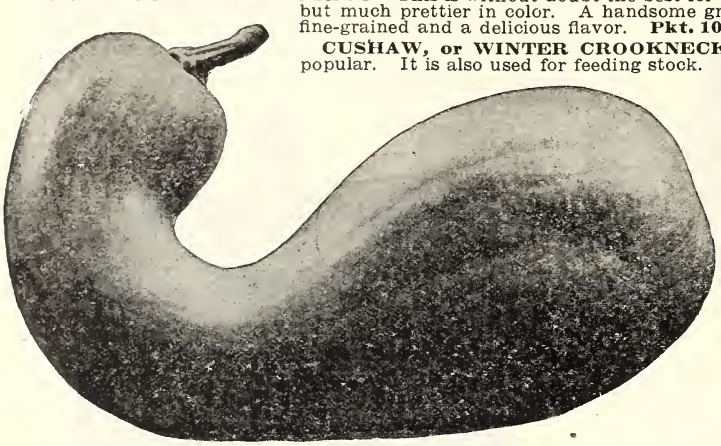
LONG RED CAYENNE—A well-known medium-early variety, having a slender, twisted and pointed pod about 4 inches long; color deep green when fruit is young, bright red when ripe. **Pkt. 10c; oz. 35c; ¼ lb. $1.00.**

PUMPKIN

(German, Grosse-Kurbis; French, Potiron; Spanish, Calabazo)

CULTURE—Pumpkins are not so particular in regard to soil as Melons or Cucumbers, but are cultivated much the same. Plant seed about 10 feet apart, in hills, dropping about 10 seed to a hill. When plants are well started, thin to 3 plants to each hill. To plant in corn place seed about every third or fourth hill after the last working.

MARYLAND SWEET POTATO—This is without doubt the best for table use, resembling somewhat the Cushaw, but much prettier in color. A handsome green and white striped. Flesh yellow, solid, fine-grained and a delicious flavor. **Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. $1.00.**



Maryland Sweet Potato Pumpkin

CUSHAW, or WINTER CROOKNECK—An old standard variety, which is very popular. It is also used for feeding stock. Long yellow crookneck, fine-grained, yellow flesh, very solid. **Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. $1.00.**

WINTER LUXURY—This is one of the best pie Pumpkins in existence, and its Winter-keeping qualities are almost unequaled. Is slightly oval in shape and o medium size. Evenly and finely netted, and is a yellowish russet color. The flesh is very tender, sweet and rich golden in color. A great producer. **Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. $1.00.**

CONNECTICUT FIELD PUMPKIN—Usually planted for feeding stock. So well known that it needs no description. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

RADISH

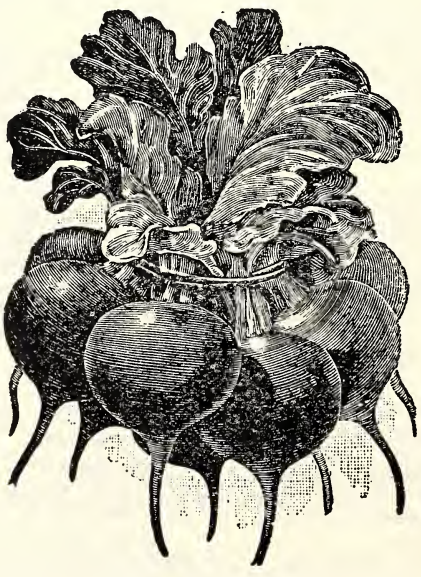
(German, Radischen; French, Radis, Rave, Petite Rave; Spanish, Rabana)

CULTURE—For forcing sow in hotbeds or under glass in rich sandy soil, made perfectly level, Scatter evenly over the surface from 50 to 100 seeds to the square foot and cover with ¼ inch of soil sifted on. Careful watering to keep soil moist, even, moderate temperature, and good ventilation are required for rapid and best root development. If the bed is a good one, the whole crop can be marketed in 21 to 40 days after planting. For open-ground culture sow on rich sandy soil as soon in the Spring as it is fit to work, in drills 12 to 18 inches apart, and thin out the plants to prevent crowding. A good dressing of nitrate of soda will greatly stimulate growth and insure tender, brittle roots. Successional sowing from 1 week to 10 days apart will keep up a supply. After the hot weather of Summer begins, it is better to sow the Summer and Winter varieties, as they do not become tough and stringy not pithy so quickly as the earlier sorts. One ounce of seed to 100 feet of drill.

EARLY LONG SCARLET SHORT TOP—This is a standard, most excellent sort either for the home garden or the market. Tops short and comparatively small. Roots smooth, slender, uniform in shape and a very attractive bright red in color. They continue crisp until fully matured, when they are about 6 inches long. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

WHITE-TIPPED SCARLET TURNIP—A good forcing variety; small size and very attractive, being a handsome bright scarlet with white tip. Very early and of good quality. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

ICICLE—A very attractive, pure white Radish; the earliest of the long white Summer sorts and of most excellent quality. The roots are somewhat shorter, with smaller tops than the long White Vienna, and matures a little earlier. One of the most desirable varieties for outdoor Summer planting. It is also adapted for forcing. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

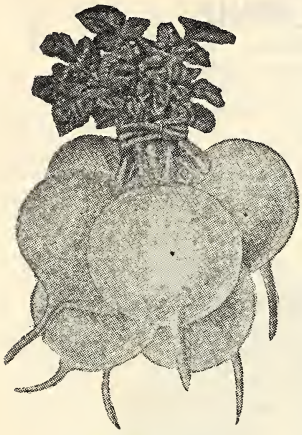


Early Scarlet Globe

FRENCH BREAKFAST—Very rapid grower; mild and tender; beautiful scarlet color, white-tipped; oblong shape. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

EARLY SCARLET GLOBE—(See cut.)—A desirable sort for hotbed forcing and outdoors; very early; flavor mild, crisp, juicy and tender; top small. Will stand heat without becoming pithy. One of the best selling and most attractive Radishes on account of its bright scarlet color and handsome shape. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

MODEL WHITE BOX (Short Top) — of quick growth; roots round, pure white; tails very thin, leaves short; flavor excellent. Fine for forcing and open ground. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**



Golden Globe

GIANT STUTTGART — A Summer variety. Grows to an immense size; white flesh, very crisp and tender; of good flavor and a good keeper. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

GOLDEN GLOBE—This variety is of quick growth, affording crisp and tender Radishes even in the hottest climate, and is extensively grown in the South. Root uniformly globe-shaped, with skin golden yellow in color; about 2 inches long by 2¼ inches in diameter when matured. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

WHITE STRASBURG—Even when comparatively small this variety is in good condition for use, and continues crisp until matured, when the roots are 4 to 6 inches long by 1½ to 2 inches in diameter. This is considered one of the best large white Summer sorts. The roots remain in condition for use much longer than the early varieties. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

WINTER VARIETIES

WHITE CHINESE WINTER, or CELESTIAL—Roots long, cylindrical, with beautiful white skin and flesh; the whitest and usually the least pungent of the Winter varieties. Flesh compact and crisp. **Pkt. 10c; oz. 15c.; ¼ lb. 25c; lb. 75c.**

LARGE WHITE SPANISH—Long and tapering, and when full grown measuring 6 to 9 inches long. Skin white; flesh white. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

ROUND BLACK SPANISH—Round, sometimes slightly top-shaped. Skin black; flesh white. Keeps well through the Winter. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

ROUND WHITE SPANISH—A good Winter-keeping variety. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

LONG BLACK SPANISH—One of the latest and hardiest long Radishes, especially adapted for Winter variety. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 75c.**

SPINACH

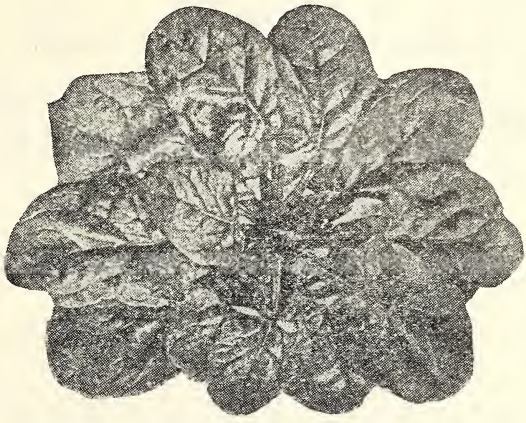
(German, Spinat; French, Espinard; Spanish, Espinaca)

Special Prices in Quantities.

CULTURE—For Summer use, sow early in Spring, in drills 8 to 10 inches apart, covering the seed 1 inch deep. Soil should be very rich, the richer the better. For early Spring use, sow in August and protect with a light covering of straw.

RESELECTED BLOOMSDALE CURLED SAVOY—A very early variety and one of the best to plant for early Spring use. Thick, glossy, dark green leaves, of medium size, pointed but quite broad and crumpled and blistered; seed round. A rapid grower ,but running to seed quickly in warm use. **Pkt. 10c; ¼ lb. 15c; lb. 30c.**

NEW ZEALAND—Unlike true Spinach in type and in that it thrives during hot weather and in any soil rich or poor. The tender shoots may be cut throughout the weather. **Pkt. 10c; ¼ lb. 25c; lb. 75c.**

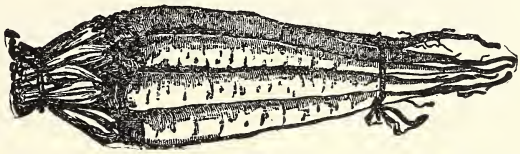


JULIANA (A recent introduction)—A very dark green, crumpled variety, in general appearance similar to Savoy, but considerably larger and broader in leaf, less crumpled and very much longer standing. **Pkt. 10c; ¼ lb. 15c; lb. 30c.**

BLOOMSDALE LONG STANDING SAVOY—A very curly and dark green sort, cannot be cut as early as the other sorts but will stand from ten days to two weeks longer than the Bloomsdale Savoy. Very slow seeder. **Pkt. 10c.; ¼ lb. 15c.; lb. $30c.**

SALSIFY Better Known as Oyster Plant

(German, Hafer-Wurzel; French, Salsifis; Spanish, Ostian Vegetal)



CULTURE—Seed should be sown in early Spring in light, rich soil, in drills 14 inches apart, and thin to 6 inches in the row. The roots are perfectly hardy, and many remain out all Winter.

MAMMOTH SANDWICH ISLAND—This variety is large and strong, growing with long, smooth, white, tapering roots, and is less liable to branch than the other sorts. Tops grassy. It is invaluable for market gardeners' use. **Pkts. 10c; oz. 20c; ¼ lb. 60c; lb. $2.00.**

RHUBARB Also Known as Pie Plant

(German, Ehabarber; French, Rhubarb; Spanish, Ruibarbo)

Is the earliest Spring vegetable and is grown for its leaf stalks, which are extensively used for pies and sauce. One ounce of seed to 125 feet of drill.

SEED—Pkt. 10c; oz. 20c; ¼ lb. 60c.
ROOTS—Each, 10c; dozen $1.00.

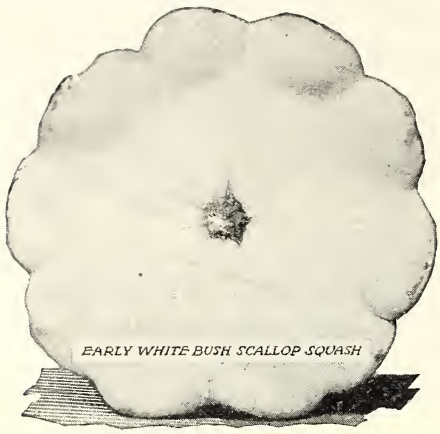
AROMATIC, MEDICINAL and POT HERBS

	Pkts.	Oz.
Anise	10c	15c
Balm	10c	30c
Borage	10c	15c
Basil	10c	15c
Caraway	10c	15c
Chervil	10c	25c
Chicory	10c	15c
Coriander	10c	15c
Dill	10c	15c
Fennel (Sweet)	10c	15c
Lavender	10c	15c
Rosemary (Aromatic)	10c	35c
Sage	10c	25c
Savory (Summer)	10c	15c
Thyme	10c	25c

SQUASH

(German, Spiese-Kurbis; French, Courge; Spanish, Calabaza)

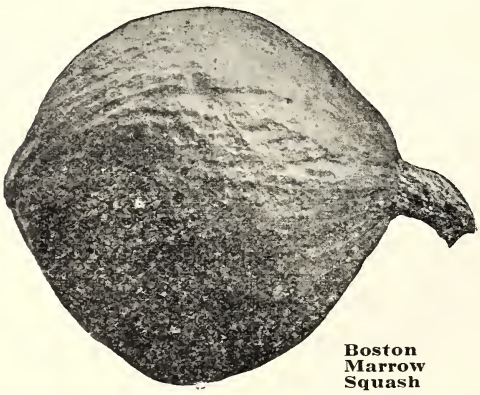
CULTURE—Squash plants are very tender and sensitive to cold, and so planting must be delayed until settled warm weather. General methods of culture are same as for Cucumbers and Melons, but Squash is less particular as to soil. Summer varieties should be planted 4 to 6 feet apart each way, and Winter sorts 8 to 10. Three plants are sufficient for a hill.



W. D. CO.s EARLY BUSH SCALLOPED—This is a very early summer variety; fruit flattened and scalloped, about 8 inches in diameter. Comparatively smooth on the surface. Color white, with a distinct greenish cast. Very prolific. **Pkt. 10c; oz. 15c; ¼ lb. 40c; lb. $1.25.**

EARLY WHITE BUSH SCALLOP—This is the well-known very early, somewhat flattened, scalloped Bush Squash, of medium size. The color is creamy white with comparatively smooth surface. The vines are vigorous and very productive. This variety is also known as Patty Pan, or Cymbling. **Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. $1.00.**

SUMMER CROOKNECK—An old standard sort, early and productive. Fruits, when fully grown, are about 1 foot long, with uniformly crooked neck and surface densely warted. Color yellow. **Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. $1.00.**



Boston Marrow Squash

BOSTON MARROW—A very productive Fall and Winter variety of medium to large size, oval shape, skin thin. Orange color; flesh fine-grained and of excellent flavor. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. 90c.**

HUBBARD—One of the best of the Winter Squashes. Vines vigorous and very productive. Fruit heavy, moderately warted, with very hard shell. Skin a dark bronze-green. Flesh a bright orange-yellow, fine-grained, thick, dry and richly flavored. **Pkt. 10c; oz. 15c; ¼ lb. 25c; lb. $1.00.**

BLUE HUBBARD—This excellent Squash of the Hubbard type is light blue in color, with hard shell and thick, fine grained flesh, which is very tender and by far the best flavored of the Winter Squash. **Pkt. 10c; oz. 15c; ¼ lb. 30c; lb. $1.00.**

TURNIP

(German, Streckruebe; French, Navet; Spanish, Nabo)

CULTURE—For Summer use sow early in Spring in light, rich soil, in drills 1½ feet apart, according to the size of the variety, and cover ½ inch deep, or sow broadcast, but in either case be sure to have the ground rich and freshly stirred. Thin early and keep free from weeds, so that the young plants will not be checked in growth. For Fall and Winter use sow the seed from middle of June to the first of August and in the manner given for Spring sowing. In the field Turnips are often sown broadcast at the rate of 1½ pounds to the acre.

Purple Top White Globe

PURPLE TOP WHITE GLOBE—(See cut)—This excellent table variety is globular in shape, of good size and very attractive in appearance. The roots are large, purple, or dark red above ground, white below. The flesh is fine-grained and tender. This sort keeps well for so early a variety and is one of the best for market use. **Pkt. 10c; ¼ lb. 15c; lb. 50c.**

EXTRA-EARLY PURPLE-TOP MILAN — Very early, fine-grained white flesh. Flat and of good size. **Pkt. 10c; ¼ lb. 15c; lb. 50c.**

PURPLE-TOP WHITE FLAT—This sort is very much similar to the Purple-Top White Globe in habit of growth, except it is flat rather than globular. **Pkt. 10c; ¼ lb. 15c; lb. 50c.**

COW HORN or LONG WHITE—This variety is clear white, except a little shade of green at the top of the root, which is long and carrot-like in form, slightly crooked and grows nearly half out of the ground. The flesh is fine-grained and well flavored, and for table use is in best condition when the roots are about 2 inches in diameter. **Pkt. 10c; ¼ lb. 15c; lb. 40c.**

YELLOW or AMBER GLOBE—Very large, yellow-fleshed, fine-grained variety. Excellent for table use or feeding stock. **Pkt. 10c; ¼ lb. 15c; lb. 50c.**

SEVEN-TOP—Cultivated extensively for the tops, which are used for greens. In many sections it is a favorite feed for stock. **Pkt. 10c; ¼ lb. 15c; lb. 40c.**

YELLOW ABERDEEN—Very hardy and productive, a good keeper; globe-shaped; color pale yellow, with purple top. Very firm in texture, and closely resembling the Ruta-Bagas in good keeping qualities. Good either for table or stock. **Pkt. 10c; ¼ lb. 15c; lb. 50c.**

RUTA-BAGAS, or SWEDES

AMERICAN IMPROVED PURPLE-TOP—Yellow-fleshed. An improvement over the ordinary Purple-Top in that it has a smaller and much shorter top. Splendid for family use or feeding stock. **Pkt. 10c; oz. 15c; ¼ lb. 20c; lb. 60c.**

THE "WISDOM" TOMATO

FIFTEEN YEARS IN THE FIELD, PLANTED UNDER ALL KINDS OF CLIMATIC AND SOIL CONDITIONS AND STILL IN THE LEAD

For Quality and Productiveness
IT IS UNEXCELLED

THE "WISDOM" TOMATO

Introduced and Grown Exclusively by WISEMAN-DOWNS CO.

UNQUESTIONABLY the best medium-early, deep red, coreless tomato on the market, extremly prolific, bearing; from 600 to 700 bushels of good solid fruit per acre. The fruit is perfectly solid and meaty, with but very few seeds; so very few that it takes about ten bushels of well selected, perfect fruit to produce one pound of seed. One outstanding feature of this variety is the fact that it puts forth such a heavy, healthy green foliage, which protects the fruit from the sun rays and thereby prevents sun scald. Our field tests have shown it to be blight resistent and wilt proof. The best for canning. The best for shipping. The best for market. In fact the best for all purposes. For a bumper crop, plant the "Wisdom."

We are the Originators and Growers. Accept No Substitute.

See That Each Sealed Package Bears Our Labels.

Pkt. 25c; oz. 50c; ¼ lb. $1.75; lb. $6.00.

Kelly's Red Tomato

Deep red, very solid and meaty making a good shipping variety uniform in size and very prolific. **Pkt. 10c; oz. 40c; ¼ lb. $1.25; lb. $4.00.**

BONNIE BEST—About 10 days earlier than Chalk's Jewel, and nearly as early as Earliana. It is a strong, vigorous grower, very prolific, heavy foliage, which acts as a protection from the hot sun. The fruit is round, red, with delicious flavor, very uniform in size and shape. Does not have the green surface like the Earliana. **Pkt. 10c.; oz. 40c.; ¼ lb. $1.25; lb. $4.00.**

IMPROVED NEW STONE—One of the largest and most solid late, bright red varieties. Vine large, vigorous and very productive. Fruits deep scarlet, nearly round or slightly flat. Smooth and uniform in size. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.75.**

CHALK'S EARLY JEWEL—Very large, smooth, red and especially fine-flavored variety. Within 10 days as early as Earliana. Very prolific. **Pkt. 10c; oz. 40c; ¼ lb. $1.25; lb. $4.00.**

JOHN BAER—Of recent introduction, it has grown into favor so rapidly until now it has taken its place along with the very earliest and best varieties. Color red, of medium size and excellent quality. **Pkt. 10c; oz. 40c; ¼ lb. $1.25; lb. $4.00.**

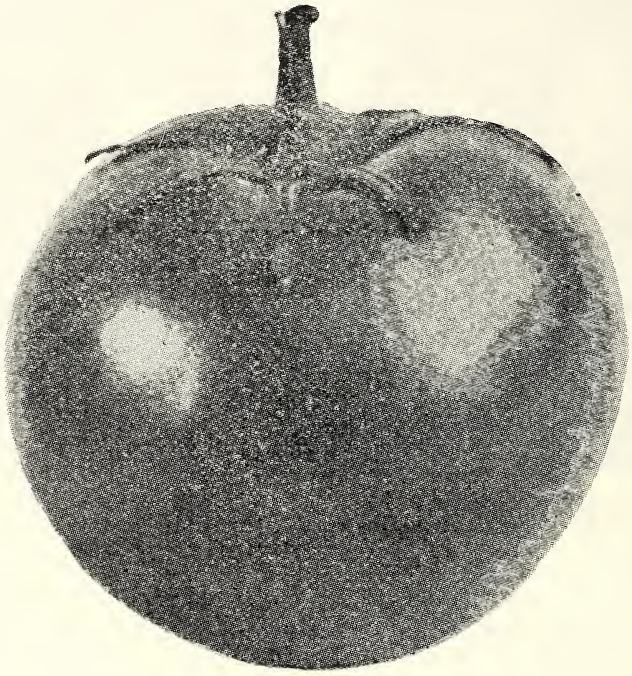
SUNNYBROOK—This is an extremely early variety. coming into maturity as early as the Earliana, and of a far better quality, of good size and a bright red color. Will stand shipping long distances much better than any of the very early varieties. **Pkt. 10c; oz. 40c; ¼ lb. $1.25; lb. $4.00.**

MASCOT—This new variety has taken its place with the extra-early varieties, maturing a week later than Earliana and far superior in quality; color ruby red; globe-shaped, solid and an excellent flavor; very prolific. **Pkt. 10c; oz. 40c; ¼ lb. $1.25; lb. $4.00.**

TOMATO

(German, Liebesapfel; French, Tomate; Spanish, Tomate)

CULTURE—Tomatoes do best on light, warm, not overrich soil, and success depends largely upon securing a rapid, vigorous and unchecked growth during the early part of the season. Sow in hotbeds from 6 to 8 weeks before they can be set out of doors, which is when danger from frost is past. When the plants have 4 leaves transplant into shallow boxes or cold frames, setting them 4 to 5 inches apart. Give plenty of air and endeavor to secure a vigorous but steady and healthy growth, so that at the time of setting in the open ground they will be strong and stocky. Even a slight check while the plants are small will materially diminish their productiveness. Set out of doors as soon as danger from frost is over, but before doing so harden off the plants by gradually exposing them to the night air and by the withdrawal of water until the wood becomes hard and the leaves thick and of a dark green color. Transplant carefully and cultivate well as long as the vines will permit.



WISEMAN-DOWNS CO.'S WILTPROOF TOMATO

Our ever present efforts to produce an early tomato of perfect quality and at the same time absolutely wiltproof, has been crowned with success. By the careful selection of the seed stock, as to quality, color, growth of vine, blight resisting qualities, etc., and by crossing the early varieties we have truly succeeded in producing a tomato; the vine of which is of remarkably strong growth, oftentimes putting out second growth and covering the ground in five foot rows, making an excellent protection to the fruit from the hot sun rays. The fruit is of globular shape, but inclined to be deeper than any other variety. Perfectly smooth, no ridges and of a nice size. Very solid and meaty and comparatively few seeds. The color is a beautiful red and of a very attractive appearance. Immensely productive. We will have only a limited supply of seed for this season owing to the small quantity which each fruit produces, we therefore suggest placing your order early before the supply is exhausted. **Pkt. 25c; oz. 75c; ¼ lb. $2.75; lb. $10.00.**

SPARK'S EARLIANA—The earliest of all Tomatoes. Especially valuable for this reason, being 10 days to 2 weeks earlier than any other sort. A bright red color; solid and very prolific. **Pkt. 10c; oz. 40c; ¼ lb. $1.25; lb. $4.00.**

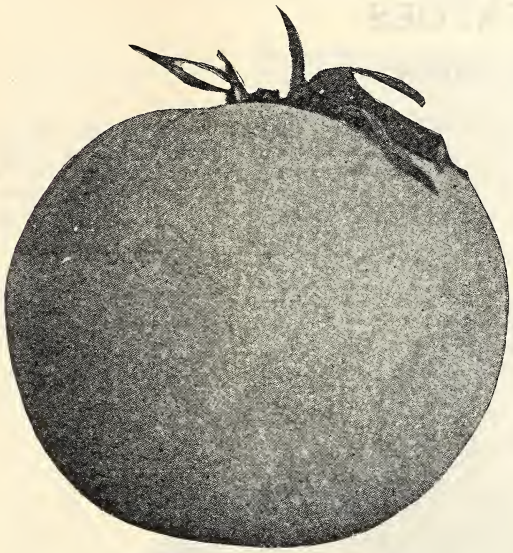
EARLY I. X. L.—Very early and very prolific. Fruit large and of a bright red color. Firm and solid. Fine flavor. A favorite with the truckers. **Pkt. 10c; oz. 40c; ¼ lb. $1.25; lb. $4.00.**

MONUMENTAL—Of recent introduction. Very large, solid, beautiful red, very prolific, very little core. Growing into popularity with the market gardeners. **Pkt. 10c; oz. 50c; ¼ lb. $1.75; lb. $6.00.**

MY MARYLAND—A good medium-early sort and a heavy bearer. Excellent for truckers and market gardeners generally. A good packing variety. **Pkt. 10c; oz. 25c; ¼ lb. 90c; lb. $3.00.**

RED ROCK—One of the finest for canning, being very solid, smooth and red. Of fine flavor, very meaty and wonderfully free from acid. A heavy producer and good shipper. **Pkt. 10c; oz. 25c; ¼ lb. 90c; lb. $3.00.**

GREATER BALTIMORE—Brilliant red color. Vines sturdy and vigorous. Very solid and firm. A good shipper. **Pkt. 10c; oz. 25c; ¼ lb. 90c; lb. $3.00.**

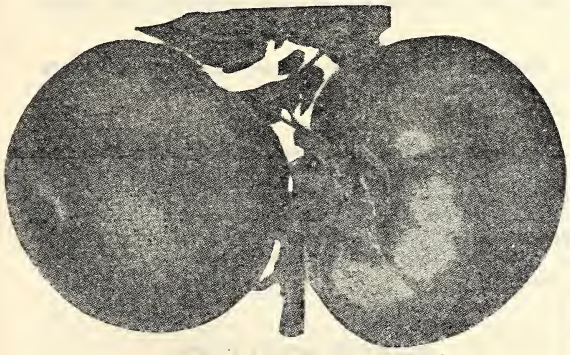


Marglobe

MARGLOBE—Just recently introduced by the Agr. Dept., Washington, D. C. A cross between the Marvel and the Globe. Unlike the Globe, this variety has red fruit, it is second early in maturity, and the plants are medium large and erect, its foliage shading the fruit and preventing sun scald. Fruits are large, smooth and globe shape, almost coreless. A very productive variety well adapted for truck growing, shipping and as a canning sort. **Pkt. 25c.; oz. 50c; ¼ lb. $1.50; lb. $5.00.**

FLORIDA SPECIAL—A splendid cropper, color, red Rated among the earlier varieties, almost as early as the Earliana, but of much better quality; excellent shipper. **Pkt. 10c; oz. 50c; ¼ lb. $1.50; lb. $5.00.**

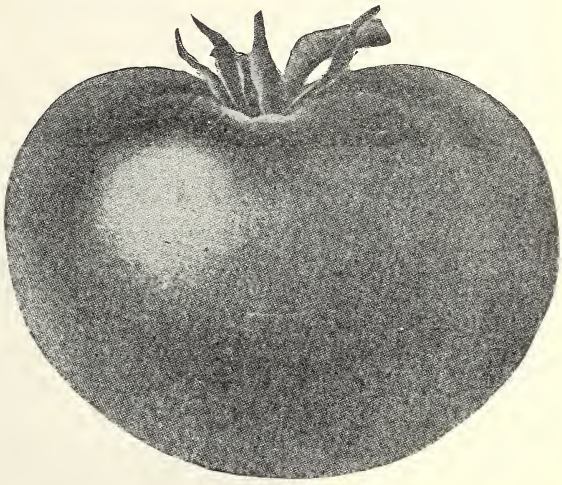
IMPROVED PONDEROSA—Immense size, very solid and luscious. For family gardens it is deserving of universal use. Unsurpassed in size and of fine quality for slicing **Pkt. 10c.; oz. 40c.; ¼ lb. $1.25.**



Sunnybrook

SPECIAL OFFER

UPON RECEIPT OF FORTY CENTS IN CASH OR STAMPS, WE WILL MAIL TO ANY ADDRESS, POSTAGE PAID, IN THE UNITED STATES OR CANADA, ONE PACKET EACH OF THE WISDOM, W.D.Co.'S, WILTPROOF AND THE BONNIE BEST TOMATOES.



Bonnie Best

PARAGON—Bright red, firm and smooth. So well known it needs no further description. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

NEW QUEEN—This sort is well known among canners, resembling somewhat the Paragon. **Pkt. 10c; oz-25c; ¼ lb. 75c; lb. $2.50.**

SMALL-FRUITED VARIETIES

PEAR-SHAPED YELLOW—Used for preserving and pickles. **Pkt. 10c; oz. 45c; ¼ lb. $1.50.**

YELLOW PLUM—Color bright yellow; excellent for preserving. **Pkt. 10c; oz. 40c; ¼ lb. $1.50.**

PEAR-SHAPED RED—Pkt. 10c; oz. 40c; ¼ lb. $1.50.

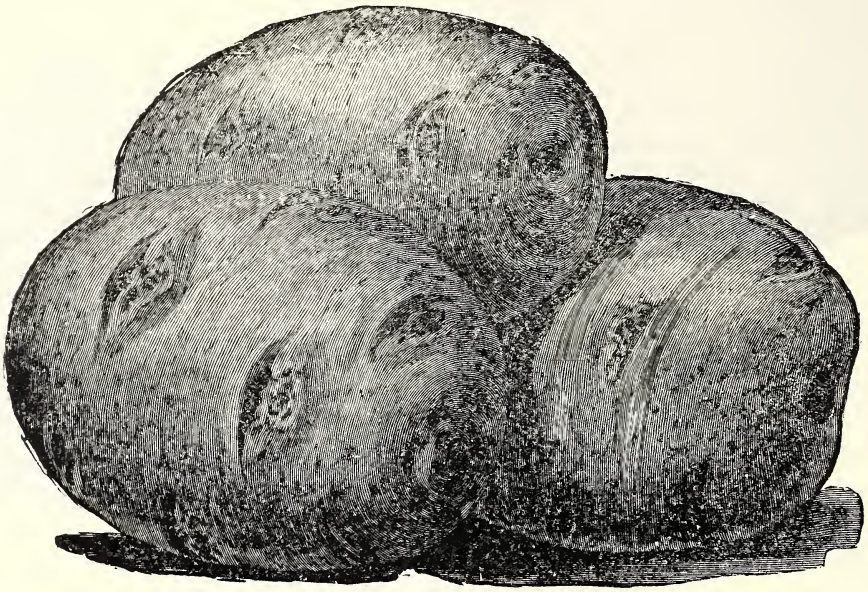
We make a specialty of growing Tomato Seed. We mean ACTUAL GROWING. Some who claim to be extensive growers in this line, we find, raise a large portion of their output at the back door of some canning factory—simply saving the seed from the refuse. Such seed may be a mixture of a half-dozen or more varieties. We grow our Tomatoes only for Seed. We select our seed from the choicest Tomatoes which are most perfect in form and true to type.

Plant the "Wisdom" Tomato—See Page 23

SEED POTATOES

NORTHERN GROWN

CULTURE—Potatoes thrive better on light sandy soil, yet under favorable conditions a good crop may be obtained on heavier soil. If stable manure is to be used, see that it is well rotted and not allowed to come in contact with the tuber. Make rows 3 feet apart and plant about 8 or 10 inches apart in the rows. Cover seed about 4 inches if ground is warm and dry; if cold and wet, cover 3 inches. Cultivate frequently to keep down the weeds. As the vines increase draw the earth around them, forming a slight ridge. When the bugs appear Spray with Paris Green. Plant from 8 to 10 bushels to the acre.



NEW YORK EARLY ROSE—A leading variety for earliness, quality and productiveness.

RURAL NEW YORKER—A valuable variety, of large size, very smooth and a great cropper; in quality unexcelled. This variety is yearly becoming more popular as the best late long keeper, and we recommend it highly.

PROSPERITY—An extra large cropper; medium early; flesh white; cooks white and mealy.

MAGGIE MURPHY—Very productive, oblong, somewhat flattened.

TWENTIETH CENTURY—A very late and heavy cropper; one of the best for Winter keeping.

MAINE, or HOULTON EARLY ROSE—An old standard variety, so well known that it needs no description. Our stock of this variety is the very best.

BURBANK—An old and well-known sort; oblong; white skin and flesh. A very heavy yielder and a splendid Potato for cooking. Late and a good keeper.

IRISH COBBLER—One of the most popular sorts on the market; favorite with the trucker; very productive; matures early; shape is chunky, almost round; very strong and deeply set; skin is netted; flesh white.

GREEN MOUNTAIN—A splendid late-crop variety: an excellent keeper; very prolific.

DAKOTA RED—A very late variety and yields even better than the McCormick. Oblong in shape; color red; flesh white and will cook dry and mealy; keeping qualities unexcelled; will yield from 25 to 35 bushels to one planted. Not to be confounded with the McCormick, as it is a true and distinct variety and of much better quality.

SWEET POTATOES

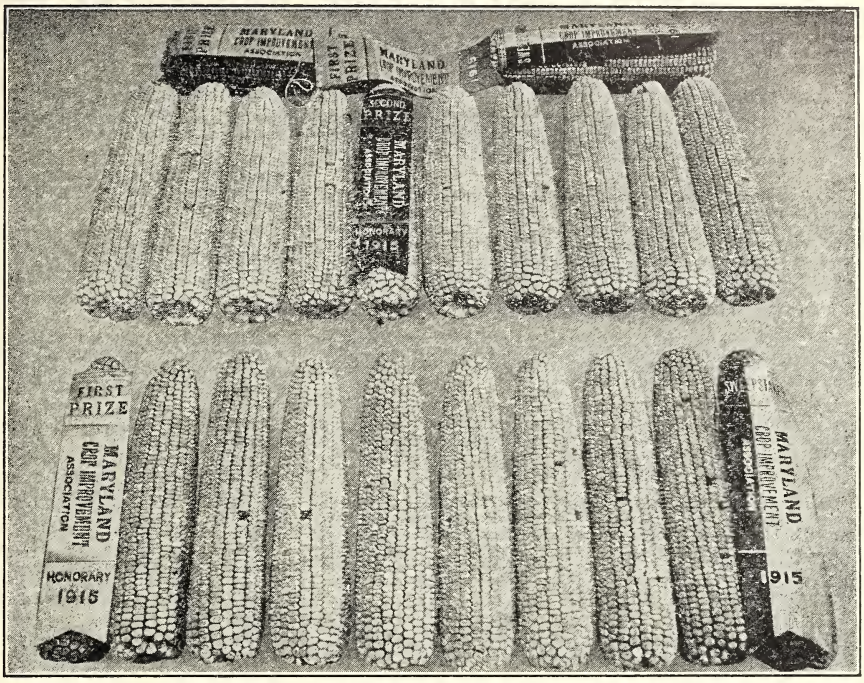
We make a specialty of Sweet Potatoes for seed, and n season can supply all the leading varieties.

Write for Prices.

Price Subject to Market Changes

Phone, Write or Wire For Prices

FIELD CORN



BOONE COUNTY WHITE—This is the prize winner. It is a medium-late Corn, requiring about 110 to 120 days to mature the grain. Grows a large, heavy, well-bladed fodder, and is an excellent Corn both for the crib or silo. The ears are from 9 to 12 inches long and well proportioned, running about 20 to 22 rows of deep grain on a medium-sized, pure white cob, with deep, well-filled medium shank. The tips are also well filled, often completely covered. The kernels are of the Dent variety, moderately rough, very deep and wedge-shaped and form straight, compact rows. It will produce 20 to 25 tons ensilage per acre, and the cured fodder makes excellent dry provender. On good ground it will average 18 to 20 tons per acre. **Pk. $1.00; bu. $3.50.**

NINETY-DAY RED COB—Can be used either as a roasting ear or, when fully matured, makes an excellent Corn for feeding stock. Matures in about 90 days. **Qt. 15c; pk. $1.00; bu. $3.50.**

"HICKORY KING" WHITE CORN—So large are the grains and so small the cob that on an ear broken in half a single grain will almost cover the cob section. Of a strong growth, the stalks take a firm hold in the ground and stand upright, resisting severe storms. It yields splendid crops on light soils and is undoubtedly the best and most productive White Field Corn for the South. **Pk. $1.00; bu. $3.50.**

CUBAN GIANT ENSILAGE CORN—Grains are pure white, very large, broad and long. Of stronger vitality than any other variety. It is the best milk producer of all Ensilage Corns, being as sweet as Sugar Corn. Outyields the Red-Cob Ensilage and is 10 to 12 days earlier. **Pk. 90c; bu. $3.00.**

GOLDEN BEAUTY—Very large, broad grains, arranged very evenly on gigantic cobs. The fodder is enormous, often growing 12 feet high. Matures late, but yields wonderful crops. Desirable for silo and ensilage purposes. **Qt. 15c; pk. $1.00; bu. $3.50.**

EARLY LEAMING—Its extreme earliness has made it a favorite with the farmer, and especially with those in the localities where the seasons are short. Ears and grains are of medium size. **Qt. 15c; pk. $1.00; bu. $3.50.**

FUNK'S YELLOW DENT—A standard variety of Yellow Dent Corn. Slender grains, of a beautiful golden yellow. The kernels grow very close together. Small cob; good yielder. **Qt. 15c; pk. $1.00; bu. $3.50.**

CLOVER SEEDS

ALSIKE, or SWEDISH (Trifolium Hybridum)—The most hardy of all Clovers; perennial. On rich, moist soil it yields an enormous quantity of hay or pasturage, but its greatest value is for sowing with other Clovers and Grasses, as it forms a thick bottom and greatly increases the yield of hay. Sow the seed in Spring or Fall, at the rate of 10 to 15 pounds per acre, when sown alone. Write for prices.

ALFALFA, or LUCERNE (Medicago Sativa)—The most valuable forage crop on the farm today. It is sown during May, August and September, these being the best months for success, although it can be sown at other times with a possible chance of doing well. Sow 20 pounds per acre.

BOKHARA or SWEET CLOVER (Melilotus Alba)—While extensively used as a bee food, this is a valuable variety for soiling (green manure); for sowing in spring on lands which are later to be sown in Alfalfa, this is excellent. It inoculates the ground and seems to render it more capable of insuring a good stand of Alfalfa than if it is not used. It grows from 3 to 5 feet high, according to soil and location; can be cut as often as three times in a season if wanted for forage. Sow 15 lbs. per acre in early Spring, alone, or 10 lbs. per acre with other crops. We handle only the true white flowering hardy variety.

RECLEANED RED (Trifolium Pratense)—This is by far the most important of all the varieties for practical purposes. Sow in Spring or Fall, and if no other grasses are used, at the rate of 15 pounds per acre. Write for prices.

CRIMSON CLOVER (Trifolium Incarnatum)—This is used principally for soiling or green manuring, for which purposes it is highly valuable. If desired for feed, cut it just before it flowers. When desired for green manure, it should be allowed to mature; its height is from 1 to 2 feet. Sow 20 lbs. to the acre. Late summer or fall seeding is usually practiced. It is not hardy for more than one season and must be sown each year.

WHITE DUTCH (Trifolium Repens)—A small, creeping perennial variety, valuable for pasturage and for lawns. It accommodates itself to a variety of soils, but prefers moist ground. **¼ lb. 15c; lb. 50c.**

FARM AND GRASS SEEDS

TIMOTHY (Phleum Pratense)—The most valuable of all the grasses for hay; thrives best on moist, loamy soils of medium tenacity. It should be cut just when the blossom falls. Sow early in the Spring or Fall, at the rate of 15 pounds per acre if alone, but less if with other grasses. Write for prices.

KENTUCKY BLUE GRASS (Poa Pratensis)—It is the most nutritious, hardy and valuable of all Northern grasses. Sown with White Clover, it forms a splendid lawn. If sown by itself for meadow or pasture, use about 28 pounds per acre. Write for prices.

ORCHARD GRASS (Dacytilus Glomerata)—Desirable for its quick growth and valuable aftermath. It is ready for grazing 2 weeks earlier than any other grasses, and when fed off is again ready for grazing in a week, and will continue green after all other grasses are withered by dry weather. It is palatable and nutritious, and stock eat it greedily when green. If sown alone, about 28 pounds per acre are required. Write for prices.

AWNLESS BROME GRASS (Bromus Inermis)—A perennial, valuable for binding the soil of embankments and for resisting both drough and cold. Sow 40 pounds per acre. Write for prices.

PERENNIAL RYE GRASS (Lolium Perenne)—A very valuable variety for permanent pasture. Succeeds well on almost any soil, but is particularly adapted to moderately moist or irrigated lands. Sow 30 to 40 pounds per acre in Spring. Write for prices.

RED TOP (Agrostis Vulgaris)—This is known as Herd's Grass. It is a good, permanent grass, standing our climate well, and makes good pasture when fed close; is valuable for low, wet meadows, producing a large return in hay. When sown alone, use about 28 pounds of the chaff seed per acre. Sow in Spring or Fall. Write for prices.

DWARF ESSEX RAPE—This makes an indispensable green food for sheep and hogs. It can be pastured 8 weeks after sowing. The growth is enormous. If one has the available land, it is good to sow in succession, as the stock eat it close to the ground, and it will not stand pasturing any great length of time. This, of course, depends upon the number of head turned on an acre. Sow 6 pounds per acre broadcast from April 1st to October 1st. It produces enormous crops and is an ideal green manure. Write for prices.

VETCHES, or TARES—This has been used in Europe for many years as a stock food and green manuring of cover crop. It does best if sown with Rye, the latter giving it support, and thus insuring enormous crops. It makes an ideal hay, and it is a pity that every American farmer does not use it. It fertilizes the ground without further trouble or cost, on account of the free nitrogen it gathers from the air. It produces a peculiar vine plant, with very narrow foliage and elongated flowers of pinkish-white in clusters. Write for prices

WINTER, or HAIRY VETCHES (Vicia Villosa)—Sow from August 1st to October 1st, 1 to 2 bushels per acre, to which we suggest adding a bushel of Winter Rye or Wheat. Write for prices.

COW PEAS—These are the best, largest yielding and most nutritious of the farm crops. They provide the most inexpensive methods of bringing soil back to a state of fertility. In the South it is the staple forage crop for Winter feeding. They grow in the poorest kind of soil, taking the free nitrogen from the air, which it deposits in the ground through the roots, leaving it very rich in ammonia. Sow from May 1st to July 1st, 2 bushels per acre broadcast, or 1 bushel per acre in drills. Write for prices.

BROOM CORN (Evergreen)—This is usually planted for its top or brush which is used for making brooms. Sow about 10 lbs. per acre in May. **20c. per qt. Write for prices on larger quantities.**

CANADIAN FIELD PEAS—When sown with oats, makes an ellegant early green feed, also valuable for turning under as a soil improver as it adds a vast amount of nitragen to the soil. Write for prices.

BUCKWHEAT (Japanese)—Makes a very fine quality of flour, but is largely used for poultry food. The flower makes ideal bee food, also sown in or near game preserves, as it makes splendid food for the birds. Write for prices.

SUDAN GRASS—This is extensively sown for green feed. Very often being used in preference to millet as it can be cut several times during the season. **15c. per lb.**

RED-TOP FANCY (Cleaned from Chaff)—Sow 8 to 10 pounds per acre. Write for prices.

RED-TOP UNHULLED (Free from Light Chaff)—Write for prices.

SHEEP PESCUE (Festuca Ovina)—A small, tufted, hardy Grass, forming a cluster of narrow, cylindrical leaves. It is of value in mixture for lawns on dry soils and in shady locations. Sow about 35 pounds per acre. Write for prices.

RHODE ISLAND BENT GRASS (Agrostis Canina)—A valuable perennial for lawns and pasturage. Much like Red-Top, only smaller. Thrives on light, dry soils as well as on rich, moist ones. Write for prices.

WOOD MEADOW GRASS (Poa Nemoralis)—Grows from 1½ to 2 feet high; has a perennial, creeping root, and an erect, slender, smooth stem. Well adapted to shaded places, such as orchards and parks, for either hay or pasturage. Sow about 30 pounds per acre. Write for prices.

CREEPING BENT GRASS (Agrostis Stolonifera)—Particularly valuable for lawns that are to be used as croquet and tennis grounds. Makes a low, velvety growth. Write for prices

MEADOW FESCUE, or ENGLISH BLUE GRASS (Festuca Pratensis)—A perennial from 2 to 4 feet high, with flat, broad leaves. One of the standard European Grasses. It succeeds well on nearly all soils, but does best on upland, loamy or moderately stiff soils. An excellent pasture Grass to take the place of the wild grasses, as it yields a large amount of early and late feed. Sow about 40 pounds per acre. Write for prices.

TALL MEADOW OAT GRASS (Avena Elatior)—A hardy perennial, much used in the South and West. Roots penetrate deep. It yields a heavy crop on any good soil, and is valuable both for meadow and pasture. Write for prices.

WHIPPOORWILL COW PEAS—Seed is reddish-brown speckled. Some claim that this variety is capable of gathering more nitrogen than others. Write for prices.

BLACK COW PEAS—This is a quick-growing variety, desirable for turning under. Write for prices.

WONDERFUL, or UNKNOWN COW PEAS—An enormous producer, very late in maturing. Write for prices.

NEW ERA COW PEAS—An early upright-growing variety; smaller seed.

SOJA BEANS—The great drought-resisting forage crop. A soil enricher, because of its nitrogen-gathering qualities. The fodder is relished in either green or dry form by cattle or dairy cows. Write for prices.

CHOICE SEED OATS—In these we offer only the very best varieties. Write for prices.

GERMAN MILLET—Excellent for planting when other hay crops are short, as it is a very rapid grower and produces a very fine crop of hay. Write for prices.

HUNGARIAN MILLET—The seed is a mixture of brown and yellow; the quality of the hay is not quite as good as the German; it can, however, be sown 2 weeks later. Write for prices.

WINTER WHEAT—In season we carry a large stock of the best varieties.

RYE—We carry both Winter and Spring Rye of the best quality. Write for prices.

SUNFLOWER, MAMMOTH RUSSIAN—This makes an excellent poultry food especially for Winter use, on account of its fattening and heating qualities. Will yield sometimes as high as 60 bushels per acre. **Lb. 10c.**

CORN (White Kaffir)—The grain is used for feeding poultry and the fodder for cattle. Grows from 4 to 6 feet high, the grain being produced on the top of stalk in the shape of a brush. Sow 10 lbs. per acre in drills. Write for prices.

FLAX—Grown for the fibre from which linen thread is made and also the seed from which linseed oil is made. Sow 10 lbs. per acre. **Lb. 20c.**

SEED OATS—We carry the best varieties for either Spring or Fall sowing. Write for prices.

SORCHUM or SUGAR CANE—Either green or in a cured state this makes ideal cattle food; it imparts a splendid flavor to milk. Can be cut several times during the season. Sow 25 lbs. per acre. **25c. per lb.**

Mulford Cultures

FOR LEGUMES

Increase Your Crops—Improve Your Soil

To get the best returns from your legume crops, inoculate the seed with MULFORD CULTURES. They increase the yield and improve the quality. More nitrogen is drawn from the air by inoculated legumes than is used by the plant itself, thus they add nitrogen and humus to the soil for the benefit of the succeeding grain crops.

To maintain soil fertility every crop rotation should include legumes. Up-to-date farmers use inoculation. The best is MULFORD CULTURES.

The date on the package is your protection.

When ordering always state kind of seed you wish to inoculate. 84174

FOR SMALL SEEDS

½ bu.	$0.60
1 bu.	1.00
2½ bu.	2.25
5 bu.	4.00

FOR LARGE SEEDS

1 bu.	$0.60
2 bu.	1.00
5 bu.	2.25
10 bu.	4.00

Garden Size (Composite Culture for Garden Beans, Garden Peas, Lima Beans and Sweet Peas) $0.25

Small Cost
Large Returns

Easy to Use
No Labor Expense

FREE DESCRIPTIVE CIRCULAR ON REQUEST

Inoculate

Alfalfa, Sweet Clover, all Clovers, Soy Beans, Cow Peas, Vetch, Peas, Beans, all Legumes with

The Improved Soil Inoculator, Nobbe-Hiltner Process

NITRAGIN

TRADE MARK REG. U. DEC. 6 1898 NO. 32 217

Restores and Maintains Soil Fertility

Registered in United States, Dec. 6, 1898 Over 26 Years Ago

Awarded Gold Medal World's Fair — St. Louis, 1904 Over 20 Years Ago

The Original Soil Inoculator

Grow legumes—alfalfa, clovers, soys, vetch, peas and beans—for valuable feed crops, soil improvers, cover crops; BUT BE SURE TO INOCULATE THEM WITH NITRAGIN. Agricultural Colleges advise inoculation. Inoculated legumes draw valuable nitrogen from the air—not the soil—increase yield and quality of the crop and leave a rich store of nitrogen in the soil for future crops. Inoculated legume seed develops heavy clusters of nodules, where nitrogen is stored, on the roots of the legume plant and without which the legume is valueless as a soil builder. A Nitragin inoculated legume crop bears heavy nodules and pays big in increased soil fertility.

Protect yourself by insisting on NITRAGIN, the original Soil Inoculator. All Inoculators are perishable; every package of Nitragin is dated as to the life of contents, for your protection. Look for the dated label when buying; agricultural colleges recommend this protection

Prices for Field Nitragin

¼ bu. size for 15 lbs. seed	$0.40
½ bu. size for 30 lbs. seed	.60
½ bu. size for Soy Beans and Cow Beans	.40*
1 bu. size for 60 lbs. seed	1.00
1 bu. size for Soy Beans and Cow Peas	.70*
5 bu. size for 300 lbs. seed	4.75
5 bu. size for Soy Beans and Cow Peas	2.50*

* These prices on Nitragin for Soy Beans and Cow Peas have been greatly reduced from former prices. Buy the economical 5 bu. size for 50c per bushel of seed, treated.

When ordering, always state kind of seed you want to inoculate.

Nitragin for Garden Use

Every garden needs Nitragin; garden size is for Peas, Sweet Peas, and Beans including Lima (3 in one Inoculant) Price.....20c

Sold in tins—not glass—packed in rich, soil like granular medium, easy to mix with seed. Contents always fresh and bacteria active and vigorous.

WISEMAN-DOWNS CO. FLOWER SEEDS

(A) **ANNUALS** are those flowers that bloom and ripen their seed the first year, then die. Among these wil be found Asters, Balsam, Mignonette, Sweet Peas, Nasturtiums, Morning Glories, and many other very brilliant and fragrant flowers. In fact, if you want flowers early in the season, and all the time until frost, a good selection of Annuals will not disappoint you.

(P) **PERENNIALS** are those flowers that endure our Winters with little or no protection, and live and bloom several years in succession. A large majority of the Perennials will bloom the first year if started early in the Spring. Hollyhocks, Larkspurs, Foxglove, Poppies, etc., are in this popular class.

ORDER BY NUMBER

104-P—ACHILLEA. PTARMICA "The Pearl." Hardy White Perennial grows about two feet high. Pure white flowers. **Pkt. 25c; ⅛ oz. $1.00.**

105-P—ACONITUM NAPELLUS (Monk's Hood)—Blue. **Pkt. 15c; ⅛ oz. 40c.**

108-A—ACROCLINIUM—An "Everlasting"; can be dried and used in winter bouquets. Also fine for borders. Fifteen inches high. Mixed colors. **Pkt. 10c; ¼ oz. 25c.**

109-P—ADLUMIA CIRRHOSA (Allegheny Vine)—Hardy climber; flowers first year from seed. **Pkt. 10c; ¼ oz. 75c.**

A—AGERATUM (Floss Flower)—Excellent for bedding or borders; blooms from early Summer till frost. Height about 2 feet. Beautiful feathery flowers.

112—Blue, Mexicanum—Pkt. 10c; ¼ oz. 20c.
113—White, Album—Pkt. 10c; ¼ oz. 25c.
119—Mixed Colors—Pkt. 10c; ¼ oz. 20c.

120-P—AGROSTEMMA—An attractive free-flowering hardy perennial. Fine for cutting. Mixed colors. **Pkt. 10c; ¼ oz. 20c.**

A—ALYSSUM (Mad Wort)—Very popular for baskets, edgings, rockwork or beds. Blooms all Summer; very fragrant.

123—Sweet Alyssum (Maritimum)—Pkt. 10c; oz. 50c.
124—Little Gem (Compactum)—Pkt. 10c; oz. 75c.

A—AMARANTHUS—Very showy plants, some remarkable for their panacles of showy flowers and others for the brilliant range of colors in the leaves.

128—CAUDATUS (Love Lies Bleeding)—Long red panicles. **Pkt. 10c; oz. 25c.**
131—CRUENTUS (Prince's Feather)—Dark red feathery flowers. **Pkt. 10c; oz. 25c.**
133—TRICOLOR (Joseph's Coat)—Red, yellow and green leaves. **Pkt. 10c; oz. 25c.**

135-A—AMMOBIUM (White Everlasting)—Pretty annual everlasting; flowers silver white with yellow discs. **Pkt. 10c; ¼ oz. 20c.**

136-P—AMPELOPSIS (Boston or Japanese Ivy)—A perennial climber, olive green leaves which turn to scarlet in the Fall. **Pkt. 10c; oz. 50c.**

137-B—ANCHUSA, CAPENSIS (Cape Forget-Me-Not)—Dwarf, light blue; good for cutting. **Pkt. 10c; ¼ oz. 20c.**

139-A—ITALICA—Dropmore variety; lovely gentian blue; grows three to five feet high. **Pkt. 10c; ¼ oz. 30c.**

140-P—ANEMONE (Windflower)—A very pleasing perennial; producing large flowers; fine for bouquets. Mixed colors. **Pkt. 10c.**

143-B—ANTIRRHINUM (Snap Dragon)—One of the most charming of old-fashioned flowers. Mixed colors. **Pkt. 10c; ¼ oz. 25c.**

—— P—AQUILEGIA (Columbine)—Very popular, and easily grown, from seed. Blooming freely during late Spring and early Summer.

166—Double Mixed—Pkt. 10c.
167—Single Mixed—Pkt. 10c.

168-P—ARABIS ALPINA (Snow on the Mountains)—One of the earliest and prettiest Spring flowers. Pure white flowers; excellent for rockeries or edging. **Pkt. 10c; ¼ oz. 20c.**

170-A—ARCTOTIS GRANDIS (African Daisy)—Produces beautiful white flowers with blueish centre; especially valuable as a cut flower, blooms lasting a week or ten days. **Pkt. 10c; ¼ oz. 25c.**

171-P—ARMERIA (Giant Sea Thrift)—Fine for rockeries, or edging; rosy-pink flowers. **Pkt. 10c; ¼ oz. 50c.**

ASPARAGUS SPRENGERI—Excellent for window boxes, hanging baskets, vases, etc. **Pkt. 10c; 50c per 100 seeds.**

—— A—ASTERS—W. D. CO.'S SELECT STRAINS—One of the handsomest and most important of Summer and Autumn flowers. The varieties offered here are of the very best selection.

179—CHINA MIXED (All Sorts)—A beautiful range of colors. **Pkt. 10c; ¼ oz. 30c.**
182—COMET SEMI-DWARF—Extra large flowering variety. Mixed all colors. **Pkt. 10c; ¼ oz. 30c.**
189—GIANT COMET—This is the finest and largest of all the Comet Asters, bearing immense fluffy flowers. **Pkt. 10c; ¼ oz. 40c.**
199—OSTRICH FEATHER—Magnificent flowers of immense size; blooms in August. **Pkt. 10c; ¼ oz. 40c.**
202—QUFEN OF THE MARKET—Early flowering of good size and branching habits; blooms in July. **Pkt. 10c; ¼ oz. 40c.**
213—VICK'S BRANCHING—Very large flowering of branching habits and an exceedingly good variety. **Pkt. 10c; ¼ oz. 50c.**

220-P—AUBRETIA (Rainbow Rock Cress)—Dwarf purple perennial; very attractive in rockwork. **Pkt. 10c; ¼ oz. 50c.**

224-P—AURICULA—Hardy perennial with flowers of many beautiful colors. **Pkt. 25c; ⅛ oz. $1.00.**

227-A—BALSAM CAMELIA FLOWERED (Lady Slipper)—An old and favorite flower, producing masses of beautiful brilliant colored double flowers in the greatest profusion. **Pkt. 10c; ½ oz. 30c.**

238-P—BELLIS (English Daisy)—A low growing Spring flowering plant. Loves a shady place and will reward the gardener with a mass of blossoms for succeeding years, if left undisturbed. **Pkt. 10c; ¼ oz. 75c.**

245-A—BRACHYCOME (Swan River Daisy)—Beautiful blue or white flowers, suitable for edgings, small beds or pot culture; 9 inches. **Pkt. 10c; ¼ oz. 35c.**

249-A—BROWALLIA (Amethyst)—Grows freely in any rich soil; blooms finely in Winter if plants are lifted in Autumn and cut back . **Pkt. 10c; ¼ oz. 30c.**

250-A—CACALIA (Tassel Flower)—Fine for borders, blooms freely from June to September; yellow and scarlet tassel-shaped flowers. **Pkt. 10c. ½ oz. 20c.**

259-A—CALENDULA (Pot Marigold)—Showy free flowering hardy annuals, producing a fine effect in beds or mixed borders. **Pkt. 10c; oz. 25c.**

265-A—CALLIOPSIS—Showy and beautiful free-flowering annuals. **Pkt. 10c; oz. 30c.**

266-P—CALLIOPSIS COREOPSIS PERENNIAL—This is one of the finest of hardy plants, with large, showy bright yellow flowers; blooms from June till Frost. **Pkt. 10c; ¼ oz. 25c.**

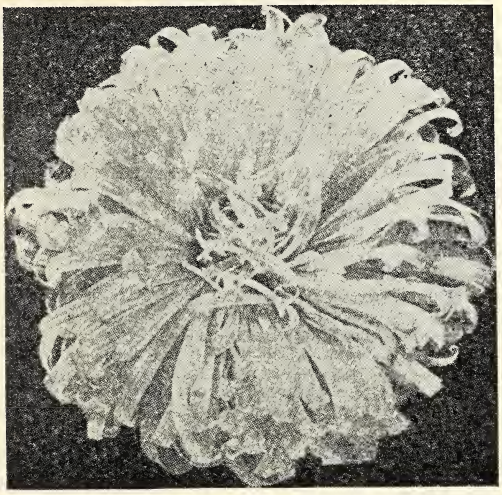
—— B—CAMPANULA (Canterbury Bells)—Hardy biennial, flowering the second season from seed producing large bell-shaped flowers of exquisite color.

269—Medium—Whit eblue and rose. **Pkt. 10c; oz. 30c.**
275—CALYCANTHEMA (Cup and Saucer)—Blue. **Pkt. 10c.**
280—PYRAMIDALIS (Chimney Bell Flower)—**Pkt. 10c.**

—— A—CANDYTUFT (Iberis Umbrellata)—Very popular and universally known;considered indispensable for cutting.

294—Finest Mixed—Pkt. 10c; oz. 30c..
295—Tom Thumb—Mixed hybrids. **Pkt. 10c; oz. 40c.**

Alyssum



Aster

298-P—CANNA (Indian Shot)—One of the finest bedding plants for the American climate.
Crozy's New Hybrids, mixed. **Pkt. 10c; oz. 30c.**

308-B—CARNATION (Marguerite)—Most popular and valued highly for their delicious fragrance and richness of colors. Mixed. **Pkt. 10c; ¼ oz. 40c.**

311-A—CELOSIA PYRAMIDALLIS PLUMOSA (Cockscomb)—Finest mixed, plume feathered. **Pkt. 10c; ¼ oz. 25c.**

312—CHILOSII (Wool Flower)—Crimson. **Pkt. 10c; ¼ oz. 25c.**

316-A—CENTAUREA CYANUS (Batchelor Button or Corn Flower)—Well-known to every flower grower and always inoluded in old-fasioned gardens. **Pkt. 10c; ¼ oz. 20c.**

330-P—CENTAUREA (White Leaved Dusty Miller)—Fine for baskets, pots. bedding, vases, etc.; also for edging. **Pkt. 10c; ¼ oz. 25c.**

332-A—CHRYSANTHEMUM—Showy and effective garden favorites. **Pkt. 10c; ¼ oz. 25c.**

349-P—CHRYSANTHEMUM, LEUCANTHEMUM (Shasta Daisy)—Very early, free flowering; pure white. **Pkt. 10c; ¼ oz. 40c.**

356-P—CINERARIA MARITIMA CANDIDISSIMA (Dusty Miller)—White leaves, fine for bedding. Half-hardy perennials, but should be treated as annuals. **Pkt. 10c; ¼ oz. 25c.**

370-A—CLARKIA, ELEGANS—A mixture containing all the colors. Double Flowering. **Pkt. 10c; ¼ oz. 25c.**

372-P—CLEMATIS—Feathery, fragrant flowers in clusters, perfectly covering the vines. Height 25 to 30 feet. **Pkt. 10c; ¼ oz. 30c.**

—— A—COBEA (Cup and Saucer Vine or Cathedral Bells)—Elegant, rapid growing climbers, attaining a height of 20 to 30 feet. Desirable for covering walls, trellis, arbors, etc.

373—SCANDENS—Purple flowers. **Pkt. 10c; ¼ oz. 25c.**

374—SCANDENS ALBA—Pure white. **Pkt. 10c; ¼ oz. 40c.**

380-P—COLEUS—Very popular and novel foliage plants for house or garden culture. **Pkt. 25c.**

383-A—CONVOLVULUS MAJOR (Morning Glory)—Finest mixed colors. **Pkt. 10c; oz. 20c.**

386-A—COSMOS—A Summer and Autumn flowering; a charming, profuse bloomer. Giant rainbow variety. All colors mixed. **Pkt. 10c; ½ oz. 20c.**

398-A—CYPRESS VINE—Popular vine, fernlike foliage and masses of beautiful small star-shaped flowers. Mixed colors. **Pkt. 10c; ¾ oz. 25c.**

400-P—DAHLIAS—One of the most popular Summer and Autumn flowering plants. Very easily grown from seed. We offer the best in single, cactus and show varieties. **Pkt. 15c; ⅛ oz. 75c.**

410-P—DELPHINIUM (Hardy Larkspur)—These beautiful flowers, so well known, are very large and of various colors, shades and markings. **Pkt. 10c; ¼ oz. 60c.**

—— A—DIANTHUS or PINKS—Most beautiful and satisfactory Summer flowering plants, unrivalled for brilliancy and rich variety of colors.

417—CHINENSIS—China pink. Double mixed. **Pkt. 10c; ¼ oz. 25c.**

420—CHINENSIS, IMPERIALLIS—Double mixed in choicest colors. **Pkt. 10c; ¼ oz. 30c.**

421—HEDDEWIGII—Large flowered, single mixed. **Pkt. 10c; ¼ oz. 20c.**

440-P—DIGITALIS (Foxglove)—Very showy, hardy plants. They are easily grown and produce freely; spikes 4 to 5 feet high, well furnished with Gloxinia-like floers of various colors. **Pkt. 10c; ¼ oz. 30c.**

445-A—DIMORPHOTHECA (Orange Daisy)—An extremely showy annual Daisy from South Africa, which suits our climatic conditions perfectly. **Pkt. 10c; ¼ oz. 35c.**

448-A—DOLICHOS (Hyacinth Bean)—A rapid growing annual climber, flowering freely in erect racemes, followed by ornamental seed-pods. **Pkt. 10c; oz. 20c.**

457-A—ESCHSCHOLTZIA (California Poppy)—Very beautiful and brilliant annual. They will grow nicely and bloom profusely over a long season in any sunny position. **Pkt. 10c; ¼ oz. 20c.**

466-P — EUPHORBIA, VARIEGATA—Attractive foliage, veined and margined with white. **Pkt. 10c; oz. 50c.**

476-A—GAILLARDIA—Very showy garden annuals, 1 to 2 feet high. Grown in masses. They are especially effective. Unrivalled as cut flowers. **Pkt. 10c; ¼ oz. 25c.**

477-P—PERENNIAL VARIETIES—Mixed colors. **Pkt. 10c; ¼ oz. 40c.**

482-P—GEUM—Beautiful semi-double flowers, dark crimson: blooms all Summer. **Pkt. 10c; ¼ oz. 50c.**

485-A—GILLIA—Very graceful annual, growing about 2 feet high with fine feathery foliage. Rich lavender blue flowers. **Pkt. 10c; ¼ oz. 25c.**

490-A—GODETIA—Very showy, of compact growth. Exquisite colors and shades that glisten in the sunlight like satin. **Pkt. 10c; ¼ oz. 20c.**

499-A—GOMPHRENA (Globe Amaranth)—Flowers resemble clover heads and can be dried and used in Winter bouquets. Sometimes called Batchelor's Button. **Pkt. 10c; ¼ oz. 25c.**

501-A—GOURDS, ORNAMENTAL—Rapid growing, interesting annual climbers, with ornamental foliage and singular shaped fruit. We offer, ornamental mixed, Dish Cloth, Pipe or Calabash, Dipper, Nest Egg and Hercules Club. **Pkt. 10c; oz. 25c.**

507-P—GREVILLEA (Silk Oak)—Very beautiful and graceful plant with fern-like foliage; easily raised from seed. **Pkt. 10c; ¼ oz. 35c.**

508-A—GYPSOPHILA (Baby's Breath)—Yields graceful sprays of pure white flowers. Fine cut flowers. **Pkt. 10c; ¼ oz. 25c.**

Dianthus, or China Pinks

Nasturtium

528-A—HELICHRYSUM (Straw Flower)—Rich in glittering colors, generally grown to dry for use in winter boquets. **Pkt. 10c; ¼ oz. 25c.**

532-P—HELIOTROPE—Always popular on account of its delightful fragrance. A half-hardy perennial flowering the whole season. **Pkt. 10c; ⅛ oz. 40c.**

537-P—HIBISCUS—Showy ornamental plants for mixed beds or shrubbery borders, having large beautifully colored flowers. **Pkt. 10c; ¼ oz. 30c.**

538-P—HOLLYHOCK—Very popular hardy perennial; grown everywhere and valuable for a back ground. **Pkt. 10c; ¼ oz. 50c.**

—— **A—IPOMEA**—Climbers of rapid growth, with beautiful and varied flowers; for covering walls, arbors, trellises, or stumps of trees they are invaluable.

552—IMPERIALIS (Japanese Morning Glory)—Pkt. 10c; oz. 25c.

553—GRANDIFLORA (Moon Flower)—Blooms open only at night. **Pkt. 10c; ½ oz. 25c.**

561-A—KOCHIA (Summer Cypress)—Forms a cypress-like hedge of beautiful green and of perfect symmetry about 3 feet high. The entire plants turn to a deep red in the Autumn. **Pkt. 10c; ¼ oz. 15c.**

562-P—LANTANA—Rapid-growing, tender perennial plants for pot culture in the Winter or garden decorations in the Summer. **Pkt. 10c; ¼ oz. 20c.**

563-A—LARKSPUR—The splendid flowers are very large and of various beautiful colors, shades and markings. Height 15 to 18 inches. **Pkt. 10c; ¼ oz. 20c.**

573-P—LATHYRUS (Everlasting Sweet Pea)—Showy, free-flowering hardy perennial climbers for covering old stumps, fences, etc.; continually in bloom; fine for cutting mixed. **Pkt. 10c; oz. 75c.**

587-A—LINUM (Flax)—Very effective and showy bedding plants, of long duration; brilliant scarlet flowers; hardy annual. **Pkt. 10c; oz. 30c.**

589-A—LOBELIA—Very desirable for pot culture, edgings, hanging baskets, etc.; blooming profusely from June to November. **Pkt. 10c; ¼ oz. 25c.**

611-A—LUPINUS (Lupine)—Free-flowering, easily-grown annuals, with luma graceful spikes of rich and various colored pea-shaped flowers, 2 feet; mixed colors. **Pkt. 10c; ¼ oz. 25c.**

624-A—MARIGOLD (Double African)—Immense flowers, densely double. One of the easiest grown annuals. **Pkt. 10c; ¼ oz. 20c.**

626-A—MARIGOLD (Double French)—Unequaled for beds or borders. **Pkt. 10c; ¼ oz. 20c.**

632-A—MARVEL OF PERU or FOUR O'CLOCKS Grows freely from seed. Blooms from the late afternoon on through the night, 2 feet; mixed colors. **Pkt. 10c; oz. 20c.**

635-A—MAURANDIA—Rapid growing slender vince, blooming profusely throughout the season; 10 feet; mixed colors. **Pkt. 10c; ¼ oz. 50c.**

636-P—MEDEOLA ASPARAGOIDEE (Smilax)—Very useful and desirable climber, for greenhouse and conservatory; excellent for bouquets and floral decorations. **Pkt. 10c; ¼ oz. 25c.**

—— **A—MIGNONETTE**—A well-known favorite, very fragrant, and no garden is complete without it.

643—GOLDEN QUEEN—Compact golden yellow. **Pkt. 10c; ¼ oz. 40c.**

644—GOLIATH—Large trusses of double red flowers. **Pkt. 10c; ¼ oz. 30c.**

645—MACHET—Large spikes, red tinted. **Pkt. 10c; ¼ oz. 20c.**

649-A—MIMOSA (Sensitive Plant)—Curious and interesting annuals, with pinkish-white flowers. The leaves close and droop when touched or shaken. **Pkt. 10c ¼ oz. 20c.**

654-A—MOMORDICA (Balsam Apple)—Very curiour climbing vine; ornamental foliage; fruit golden-yellow; warted; 10 feet. **Pkt. 10c; ¼ oz. 20c.**

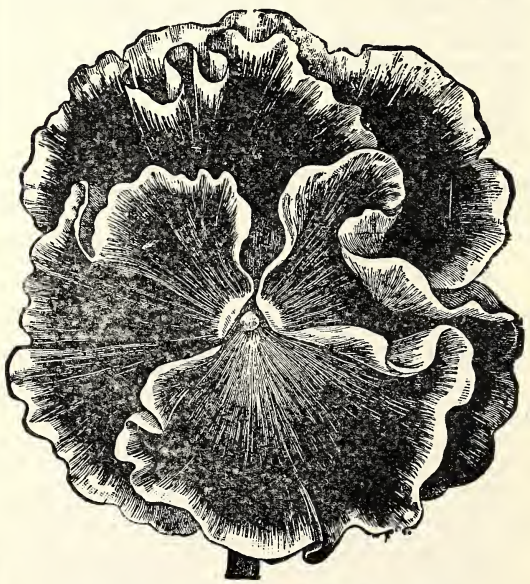
659-P—MYOSOTIS (Forget-Me-Not) — Popular perennials, flowering the first season, from early spring sown seed, or they may be sown in Summer or early Fall, and if bedded out and given protection, like pansies, they will Winter over and commence flowering in early Spring. **Pkt. 10c; oz. 40c.**

—— **A—NASTURTIUM**—One of the most popular of all annuals. Easily grown, as they will grow most anywhere except in the shade. Blooming profusely throughout the Summer, they may be used to cover unsightly railings and to trail over rough ground with fine effect. Excellent for cut flowers.

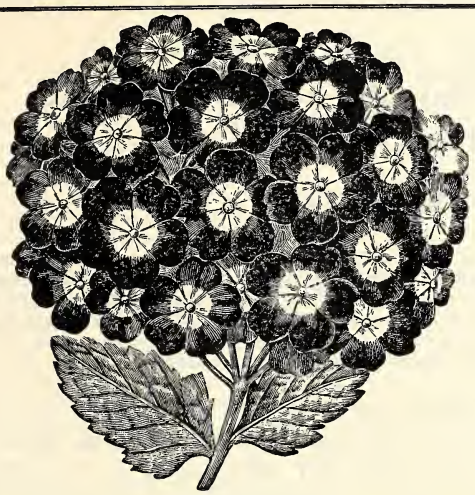
665—DWARF MIXED COLORS—For massing in beds. **Pkt. 10c; oz. 15c; ¼ lb. 30c.**

670—TALL MIXED COLORS—For climbing on trellises, verandas, etc. **Pkt. 10c; oz. 15c; ¼ lb. 25c.**

674-A—NIGELLA (Love in a Mist, or Devil in the Bush)—Handsome flower, requiring but little care. Flowers bright and showy, very curious seed pods. **Pkt. 10c; oz. 25c.**



W. D. Co.'s Giant Flowering Pansies



Verbennas

680-P—PANSIES (W. D. Co's Giant Flowering)—For size of bloom, heavy texture and varied shades and colors, with their distinct markings; this strain cannot be excelled. With slight protection,such as meadow hay, leaves or similar material, full-grown plants Winter over in the open ground and commence flowering in early Spring with the Snowdrops and Crocus. **Pkt. 25c; ⅛ oz. $1.00.**

689-A—PETUNIA—These are almost indispensable for garden decoration. They flower in a few weeks' time from seed and continue to grow, bud and bloom in luxuriance until frost. Mixed. **Pkt. 10c; ¼ oz. 30c.**

700-A—PHLOX DRUMMONDI—For beds and massing nothing can surpass these beautiful annuals. They produce immense trusses of large brilliant flowers of numberless hues throughout the Summer. Mixed colors. **Pkt. 10c; ¼ oz. 25c.**

701-P—PHLOX DECUSSATA (Hardy Perennial)—Hardy Herbaceous Perennial and quite distinct from the varieties of Phlox Drummondi, which are annuals. Mixed all colors. **Pkt. 15c; ¼ oz. 75c.**

—— POPPIES—The flaming brilliancy of color make these real garden assets . Sow the annual sorts thinly in early Spring and do not transplant; start the perennial varieties indoors in February and transplant when safe.

HARDY ANNUALS:

705—Shirley mixed. Silk or ghost poppy. **Pkt. 10c; ¼ oz. 20c.**

710—Paeony flowered. Double mixed, all colors. **Pkt. 10c; ¼ oz. 20c.**

HARDY PERENNIALS:

715—Iceland. Yellow. **Pkt. 10c; ¼ oz. 25c.**

720—Orientale. Large deep crimson flowers. **Pkt 10c; ¼ oz. 35c.**

723-P—PHYSALIS FRANCHETI (Chinese Lantern)—An ornamental plant, forming dense bushes about 2 feet high producing orange-scarlet lantern-like fruits, which can be cut and dried for Winter bouquets. **Pkt.10c.**

—— A—PORTULACA—Brilliant garden annual, 6 inches high, luxuriating in warm dry sunny situations and blooming profusely from early Summer to Autumn. Colors range through innumreable shades of red, yellow, pink, striped, white, etc.

728—Extra double mixed large flowering. **Pkt. 10c; ¼ oz. 60c.**

729—Single mixed. **Pkt. 10c; ¼ oz. 25c.**

—— P—PRIMULA (Primrose)—These charming and beautiful flowers are indispensable for Winter or Spring decorations in the home or conservatory.

737—JAPONICA (Queen of Primrose)—Mixed. **Pkt. 25c.**

740-P—PUERARIA THUNBERGIANA (Kudzu Vine)—A very strong-growing climber. The leaves overlap each other so as to form a dense screen. **Pkt. 10c; ¼ oz. 20c.**

742-P—PYRETHRUM—Few plants are more popular for borders. The bright yellow foliage makes it especially effective. **Pkt. 10c; ¼ oz. 25c.**

—— A—RICINUS (Castor Oil Beans)—Ornamental plants of stately growth and picturesque foliage, with brilliant colored fruit, producing subtropical effect.

746—SANGUINEUS—Blood red stalks, red fruit. **Pkt. 10c; oz. 20c.**

747—BORBONENSIS—Very tall. **Pkt. 10c; oz. 20c.**

748—ZANZIBARIENSIS—Large dark green leaves. **Pkt. 10c; oz. 20c.**

749—CAMBODGENSIS—Stems and leaf stalks are ebony colored. **Pkt. 10c; oz. 20c.**

756-A—SALVIA SPLENDENS (Scarlet Sage)—The standard sort; an easy, continuous and persistent bloomer; beautiful bright scarlet; 3 feet. **Pkt. 10c; ¼ oz. 75c.**

763-A—SCABIOSA (Mourning Bride)—Perfectly double flowers: useful for cutting; gracefully borne upon long slender stems; range of color white to rich pink, crimson to deep red, lilac and black. Mixed. **Pkt. 10c; ¼ oz. 25c.**

Scarlet Sage

780-A—STOCKS (Gilliflower)—All the varieties are desirable as pot plants as well as in the open garden. They are greatly prized for cut flowers on account of there fragrance and colors. **Pkt. 10c; ¼ oz. 50c.**

788-P—SWEET WILLIAM—There is perhaps no flower more favorably known than the Sweet William. No garden is complete without it. They are easily grown from seed and produce a wonderful array of colors. Perfectly hardy. **Pkt. 10c; ¼ oz. 30c.**

794-A — THUNBERGIA (Black-Eyed Susan) — Beautiful rapid growing annual climbers, preferring a warm, sunny situation; used extensively in hanging-baskets, vases, low fences, etc., very pretty flowers in buff, white, orange, etc., with dark eyes. 4 feet. Mixed colors. **Pkt. 10c; ¼ oz. 30c.**

798-A—VERBENA (Mammoth)—Splendid for beds or massing; the trusses and individual flowers of the largest size, of brilliant colors, free blooming and of vigorous habit, for best and quickest results seed should be sown early in the house or hot bed and transplanted to flowering quarters in May. **Pkt. 10c; ¼ oz. 30c.**

—— P—VINCA (Madagascar Periwinkle)—Ornamental free-blooming plants and one of the most satisfactory flowering plants we have; fine for cut flowers; every bud opening when placed in water.

800—ROSEA—Rose, darkeye. **Pkt. 10c; ¼ oz. 40c**

801—ALBA—White, crimson eye. **Pkt. 10c; ¼ oz. 40c.**

802—Mixed colors. **Pkt. 10c; ¼ oz. 30c.**

804 P—WALLFLOWER—Deliciously fragrant and combine many shades of color—the orange, purple and chocolate predominating. Half-hardy perennials. 1½ feet. **Pkt. 10c; ¼ oz. 25c.**

805-A—ZINNIAS (Youth and Old Age)—The Zinnia is one of the most brilliant, showy and satisfactory annuals, and has long been a general favorite. **Pkt. 10c; ¼ oz. 25c.**

Zinnias

WISEMAN-DOWNS CO.'S SELECT SWEET PEAS

SPENCER OR ORCHID VARIETIES

HOW TO GROW SWEET PEAS

The soil for Sweet Peas should be rich and deep. A good rich loam, with plenty of well-rotted manure in it, is the ideal soil for raising good plants that will produce plenty of blooms. Seed should be sown as early in the season as the ground can be worked, which is usually between the middle of March and the middle of April in the latitude of Baltimore. It is best to dig a trench about 6 inches deep, in the bottom of which sow the seed. Cover with about an inch of soil, pressing it down firmly. As soon as they are above the ground thin out to 2 to 4 inches apart. They should be staked up with brush or wire about 4 feet high. During dry weather water frequently.

ALEXANDER MALCOLM—Fine cerise toned orange scarlet. Beautifully waved and nicely placed on long stems. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

APPLE BLOSSOM—Standard rose, showing veins of deeper rose, wings light carmine, the whole color overspreads on primrose. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

AVALANCHE—This is the purest white variety in Spencer form. The substance of the flower is unusually good for a white variety, thus accentuating the purity of the colors. The variety is a strong, robust grower. **Pkt. 25c; oz. 50c; ¼ lb. $1.50; lb. $5.00.**

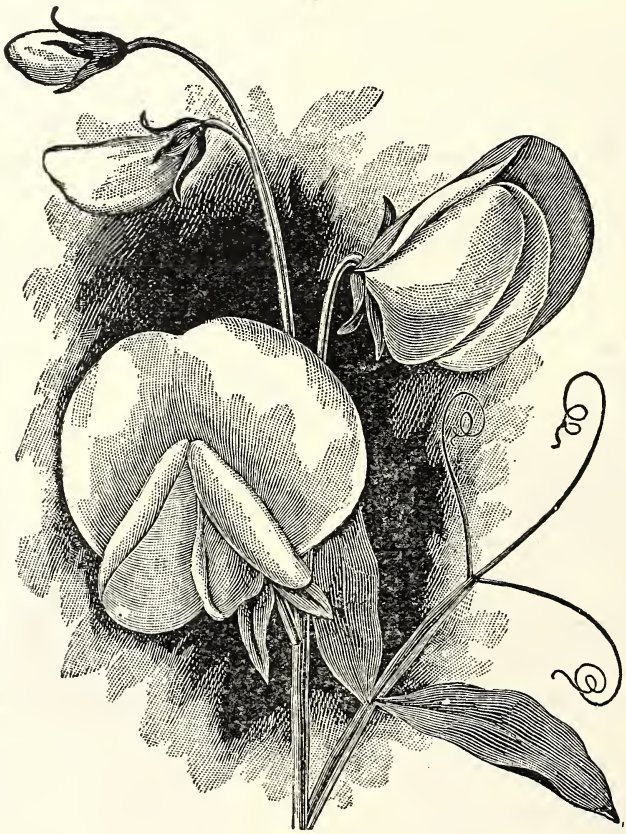
BARBARA—A magnificent salmon colored flower. This variety must be shaded with very light cheese cloth, otherwise the color burns in the sun. When properly shaded it develops flowers of fine size, beautifully waved and borne on good long stems. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.75.**

BLANCHE FERRY SPENCER—A bright rose-pink; wings sometimes lightly flushed with pink. This is a bold flower and a robust grower, the best of the bicolors. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

CHARITY—A fine rich crimson Sweet Pea, standard and wings being the same tone of color. It is a large flower and a strong grower. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

CRIMSON KING—A deep ox-blood crimson Sweet Pea. The flowers are beautifully waved and the depth of color is remarkable. A fine strong growing variety. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.75.**

DOBBIE'S CREAM—The flowers are deep cream, are of unusual size, very much waved or crimped, the standards sometimes being double. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.50.**



HEAVENLY BLUE—A clear blue Sweet Pea. The flowers are of good size and the variety is vigorous in growth. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.75.**

KING EDWARD SPENCER—A fine rose-crimson Sweet Pea. The flowers are nicely waved and borne on good stout stems. The growth is vigorous and the vines very floriferous. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.50**

KING MANUEL—For those desiring a dark maroon Sweet Pea, King Manuel will "fill the bill." It is a large, almost black maroon variety, of strong growth. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

MARY PICKFORD—The most popular light-cream pink Sweet Pea. The color is most dainty and the flower is beautifully shaded with soft salmon. The flowers are quite large and borne on good, strong stems. A vase of Mary Pickford gives a charming effect. **Pkt. 25c; oz. 50c; ¼ lb. $1.25; lb. $4.00.**

OTHELLO SPENCER—A rich, deep maroon Sweet Pea of strong growth. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

PRESIDENT—A magnificent and dazzling orange-scarlet variety. This variety should be shaded with light cheesecloth or muslin in order to get the best of the color. It is a strong grower and a desirable flower. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

YOUTH—This is an unusually large flower. The color is white with a Picotee edging of clear rose-pink. One outstanding feature of Youth is the strong and delightful perfume, the perfume being stronger in this variety than any other. Spencer variety to-date. It is a vigorous grower and the stems entirely satisfactory. **Pkt. 10c; oz. 25c; ¼lb. 75c; lb. $2.75.**

SPENCER MIXTURE—All colors. **Pkt. 10c; oz. 20c; ¼ lb. 60c; lb. $2.00.**

GRANDIFLORA VARIETIES—Mixed.

WISEMAN-DOWNS CO.'S SPECIAL MIXTURE—This unsurpassable mixture of Sweet Peas is a studied formula, containing correct proportions of various bright colors and shades, supplying a harmony of brilliancy **Pkts. 10c; oz. 15c; ¼ lb. 50c; lb. $1.50.**

BEGONIAS (Tuberous Rooted)

We offer a very good strain in both, single and double, in colors as follows, scarlet yellow, white, crimson and salmon. **25c each; $2.50 per dozen.**

FANCY LEAVED CALADIUMS—The choicest Brazilian introductions as well as a number of fine new varieties. **25c each; $2.50 per doz.**

CINNAMON VINE ROOTS (Hardy)—Dark green, dense foliage with small, cinnamon scented blossoms. Extra large tubers. **10c each; $1.00 per doz.**

MADEIRA OR MEXICAN VINE—One of the most popular climbers. Makes a thick shade, grows rapidly. Strong Roots. **10c each; 60c per doz.**

BUDDLEIA, VARIABILIS MAGNIFICA—As a summer outdoor cut flower there are few plants that can be produced at anything like the low cost of Buddleia; a 3-inch pot plant will bloom profusely the first year and develop into a large bush. The long flower spikes are made up of numerous small florets; the color is a beautiful lilac, slightly on the shade of lavender; the cut blooms keep well in water, while the plant is a mass of bloom from late June until frost. It is perfectly hardy and increases in size and vigor each season. 3-inch pots, **30c each.**

CLEMATIS, PANICULATA (Japanese Virgin's Bower)—A strong, luxuriant grower, with light green foliage. At the close of August innumerable star-like flowers cover the vine in a sheet of fragrant white. 4-inch pots, **40c each.**

HARDY ENGLISH IVY—This is an invaluable plant for covering brick and stone walls and buildings. It rarely ever dies out and needs no attention. 4-inch pot-plants, **40c each.**

CANNAS—Large Flowering

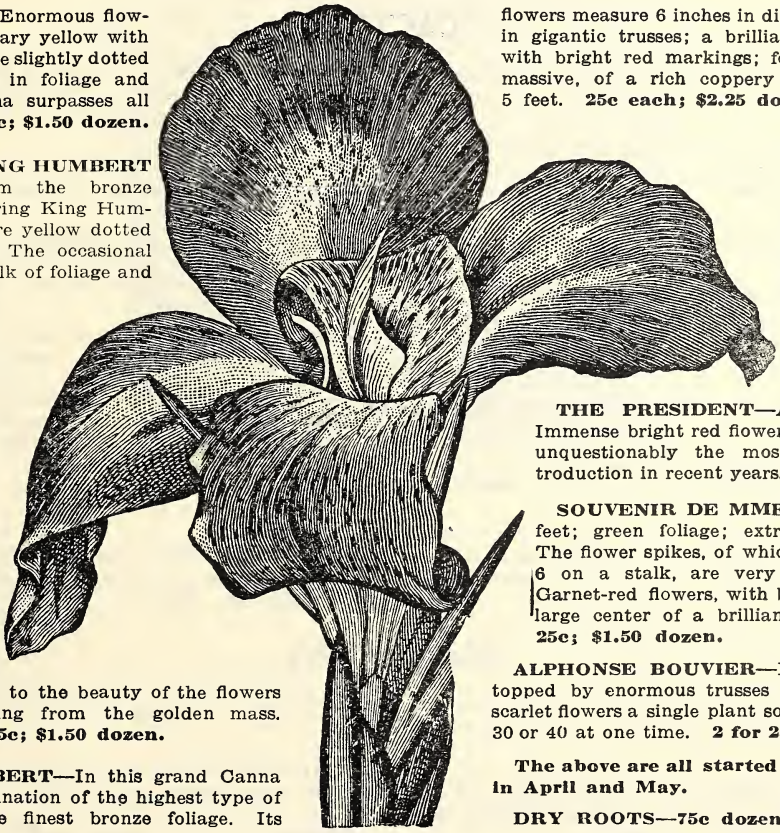
For a brilliant show all Summer there is no plant excelling the Canna. It even surpasses the Geranium in its gorgeous display of brilliant colors, blooming continuously from the time of planting until cut down by frost. As Cannas are good pot plants either for Summer or Winter flowering, they may be lifted and potted in the Fall before the approach of frost. Grown in this way, they are ready to continue their good work without disturbing the plants.

AUSTRIA — Enormous flowers, beautiful canary yellow with a silvery hue inside slightly dotted with red. Both in foliage and flower this Canna surpasses all others. **2 for 25c; $1.50 dozen.**

YELLOW KING HUMBERT—A sport from the bronze leaved red flowering King Humbert. Flowers are yellow dotted orange-scarlet. The occasional reversion of a stalk of foliage and flowers to the typical King Humbert makes a bed of this variety very interesting. 4½ ft.

EUREKA—The best white variety; free bloomer; green foliage, 4 feet.

FLORENCE VAUGHAN—This is the best yellow Canna spotted with red dots. The yellow is intense, and the dots, not too pronounced, add to the beauty of the flowers without detracting from the golden mass. 4 feet. **2 for 25c; $1.50 dozen.**



KING HUMBERT—In this grand Canna we have a combination of the highest type of flowers with the finest bronze foliage. Its flowers measure 6 inches in diameter, produced in gigantic trusses; a brilliant orange-scarlet with bright red markings; foliage broad and massive, of a rich coppery bronze. Height 5 feet. **25c each; $2.25 dozen.**

METEOR—Magnificent bedding variety with massive erect trusses of deep blood-red flowers, produced with a freedom that leaves nothing to be desired. 5 feet. **2 for 25c; $1.50 doz.**

THE PRESIDENT—A great Canna. Immense bright red flowers in fine clusters; unquestionably the most sensational introduction in recent years. 4 feet.

SOUVENIR DE MME. CROZY—Five feet; green foliage; extra-strong grower. The flower spikes, of which there are 5 to 6 on a stalk, are very large and full. Garnet-red flowers, with broad border and large center of a brilliant yellow. **2 for 25c; $1.50 dozen.**

ALPHONSE BOUVIER—Its every shoot is topped by enormous trusses of vivid crimson-scarlet flowers a single plant sometimes showing 30 or 40 at one time. **2 for 25c; $1.50 dozen.**

The above are all started plants. Ready in April and May.

DRY ROOTS—75c dozen.

All Prices Subject to Change Without Notice

List of Wiseman-Downs Co.'s
SUPERB DAHLIAS

Dahlia

CACTUS

ADVANCE—Brightest fiery-scarlet, base tinged yellow. An immense flower. **50c.**

ALEXANDER—Very deep crimson, shaded maroon. A variety of very fine form. Good habits of growth and very productive. **35c.**

ATTRACTION—Beautiful lilac. **50c.**

BERTRAM S. VARIAN—A very brilliant, deep scarlet of the moderately incurved form, of good size on long stems. This in one of the freest flowerin Dahlias. **50c.**

BOBBY WARREN—A pure white. Extra fine. **50c.**

BRIDES BOUQUET—An ideal white cactus and profuse bloomer, extra long stem, and a Dahlia that stands up well when cut. **60c.**

CONQUEST—A robust and sturdy grower and one of the finest produced. Color, a deep, crimson-maroon. **50c.**

EDITH CARTER—A variety of great beauty and one of the finest for exhibition purposes. Color, yellow, heavily tipped bright rosy carmine. Erect habit. **60c.**

Golden Eagle—Orange-yellow, suffused rose and fawn. Flowers are produced on long stiff stems. **75c.**

GOLDEN GATE (New American Hybrid Cactus Dahlia)—A gigantic flower of deep orange-yellow, overlaid bronze. Very vigorous grower. **40c.**

KALIF—A truly majestic flower, of perfect Hybrid Cactus form, and in color, a beautiful pure glowing scarlet. The gigantic flowers, which are produced freely, are held erect on strong stems of wiry stiffness, making it a most effective and useful variety for cutting as well as for garden decoration. **75c.**

MILTON HOWARD—A charming shade of bright pink, with white at center and tips of petals. **$1.00.**

REV. DR. BAKER—The coloring is very odd, being a novel shade of plum. Excellent for exhibition or garden purposes. **50c.**

DECORATIVE

ALADDIN—A huge shaggy flower, petals long and fluffy, of a beautiful rose-red color. Extra fine flower. **$1.00.**

AL KORAN—Yellow, suffused with golden rod and amber. The petals have the Marcelle wave which makes it very attractive. **$2.00.**

AMON RA—Copper-orange and scarlet. Long stems. **75c.**

AZALIA—Very large, soft creamy yellow with petals suffused pink. **$1.00.**

BELOIT—Crimson. Large flowering. **50c.**

DAHLIAS-Continued

DECORATIVE

BERTHA STORY—A very large flower of beautiful rose-pink on long stems. **$1.00.**

CLARABEL—Color, rich rosy purple. **35c.**

CATHERINE WILCOX—White with points of petals tipped cerise. A very strong grower and free bloomer. **$1.50.**

CAROLYN WINTJEN—A very beautiful salmon-pink with rose shading. Very large flower with a good stem. **$1.00.**

CHAMPAGNE—Beautiful Autumn shades. **$1.00.**

MINA BURGLE—A glowing and most brilliant scarlet. The flowers are of perfect Decorative Type and are borne upon long wiry stems. **60c.**

MINOS—The color is intense velvety maroon, almost black. An ideal cut flower variety. **35c.**

LE GRAND LILAS—Lavender, shading to royal purple; very large flower and excellent stem. **$1.00.**

LE GRAND MANITOU—Pure white artistically stripped, splashed and blotched deep violet-purple. The plants occasionally bear a solid purple colored flower. **50c.**

Hybrid Cactus Dahlia

DARLENE—An exquisite shade of live shell-pink with dainty blending of white at center. **50c.**

ELIZABETH SLOCOMBE—Color rich purplish-garnet. The flowers are carried on long stiff stems. **$1.00.**

GRACE ALLAN FAY—Rosy crimson shading darker in the center. Large flowers on good stems. **$1.00.**

JEANNE CHARMET—The color is a most exquisite shade of lilac pink, daintily shading to pure white towards the center. **50c.**

JUDGE ALTON PARKER—A wonderful shade of golden-buff. A wonderful exhibition variety, grown freely on long erect stems. **$1.00.**

MRS. LOUISE FINGER—A large Decorative of a pure white color, shading to a faint yellow in center. Later in season blooms come pure white. **60c.**

MEPHISTOPHELES—A very large flower and are a deep ruby-red, with a small golden yellow point at the end. of the petals. **$2.00.**

MRS. HARTONG—Deep orange, tipped pinkish white. **35c.**

SNOW DRIFT—A giant, clear white. The flower has a good depth with broad waxy petals of the true decorative type. **$1.00.**

DAHLIAS-Continued

SHOW

ARTHUR LEFAVOUR—Color a beautiful sulphur-yellow, lined, striped and speckled deep, gorgeous crimson. **50c.**

A. D. LIVONI—Beautiful soft pink, well formed flowers with long stems. Free flowering. **25c.**

DAVID WARFIELD—Beautiful deep cherry-red, producing its mammoth flowers on stiff wiry stems, well above the foliage. **50c.**

ARABELLA—Sulphur-yellow, tipped pinkish-white. **25c.**

GLOIRE DE GUSCARD—In color it is an almost indescribable combination of orange-red, yellow, pink and white. **35c.**

LES AMOURS DE MADAME—Delicate pale rose, striped scarlet. **35c.**

LUCY FAUCETT—Pale yellow, striped deep pink or light magenta. Very large and free flowering. **35c.**

MAUDE ADAMS—The color is a pure snowy-white, very effectively overlaid clear delicate pink. **50c.**

MAYOR DUNN—A beautiful clear scarlet flower. Remarkably free bloomer and very showy. **35c.**

MRS. C. D. ANDERSON—It is a rich purplish crimson and bears large flowers on the best of stems. **50c.**

POLLY SANDALL—A novel combination of bronze-yellow, veined and blotched pinkish-white. **35c.**

Princess Victoria—Pure canary yellow. Long stems, perfect form and free bloomer. **25c.**

ROBERT BROOMFIELD—Pure white. Tall grower. **25c.**

VIVIAN—A wonderful flower, the color being white, effectively edged rose-violet. **25c.**

PEONY-FLOWERED

ANNY DOPPENBERG—The color is sulphur- yellow and the habit of growth is all that can be desired. **50c.**

ALTA POWELL—A very bright lemon-yellow, overlaid, blending to and edged carmine red; on long stiff stems. **50c.**

BERTHA PAULDING—The flowers are an exquisite, deep rose-pink, of good depth and with an open center. **50c.**

CHICAGO—A clear purple with an exquisite ring of yellow at the center. Plants are very dwarf. **50c.**

CLEOPATRA—The color is a fine shade of yellow, the reverse side of the petals being a tangerine shade. **$1.00.**

Elizabeth Boston—Enormous blooms of deep crimson, shading to old gold at the tips. **$1.00.**

GRACE KIRSCHNER—White, daintily overlaid cameo-pink. Very large flowers. **50c.**

HORTULANUS BUDDE—A bright scarlet of splendid habit. **25c.**

JONTEEL—Beautiful pale corinthian pink blending to golden yellow at the center. **50c.**

KING EDWARD—A large purple flower of good substance. **25c.**

PRINCE CAMILLE—Color, velvety crimson, shaded rose. **50c.**

ROCHESTER—A gorgeous crimson-maroon, effectively striped and splashed pure white. A beautiful flower of most original form. **50c.**

WAMPUM—Pale barium yellow, heavily striped and splashed crimson-scarlet. **50c.**

POMPON

AMBER QUEEN—Rich, clear amber, shaded apricot. **50c.**

BRUNETTE—Crimson, blotched white. **50c.**

CLARA HARSH—Perfect blooms of yellow; tipped with crimson. **50c.**

FASCINATION—Pink and lavender, blotched white. **50c.**

GANYMEDE—Amber, tinted lilac, a novel and distinct variety. **50c.**

GUIDING STAR—White, quilled petals. **50c.**

LASSIE—Yellow, edged and tipped white. **50c.**

LITTLE BEAUTY—Soft pink. **50c.**

LITTLE JENNIE—Primrose yellow. **50c.**

MIDGET—Salmon, edged pink. **50c.**

PRINCE CHARMING—Cream, tipped purple. One of the best. **50c.**

RAPHAEL—Very dark maroon of extra fine form. **50c.**

ROSEBUD—White, edged bright rosy pink. **50c.**

LIST OF NAMED VARIETIES AT ATTRACTIVE PRICES

BIG BOSTON—Large red. Decorative. **15c.**

BREAK O DAY—Sulphur-yellow. Decorative. **35c.**

CHAMPAGNE—Autumn shades. Decorative **$1.00.**

DOAZON—Large red. Decorative. **15c.**

DR. TEVIS—Bronze Rose. Decorative. **35c.**

DAKOTA—Coppery-red. Decorative. **50c.**

EARL WILLIAMS—Red tipped with white. Very beautiful. Decorative. **75c.**

GLADYS SHERWOOD—White. Decorative. **50c.**

HOLLYWOOD—Salmon pink. Cactus. **75c.**

JERSEY BEAUTY—Large pink. Decorative. **75c.**

JOPPA—Golden apricot. Deocrative. **75c.**

JUDGE DUNCAN—Maroon. Decorative. **75c.**

JUDAE MARINE—Orange, pink and red. Decorative. **75c.**

JACK'S DISCOVERY—Yellow and red. Decorative. **25c.**

LAVINE—Large white. Cactus. **15c.**

MRS. I. D. V. WARNER—Orchid pink. Decorative. **75c.**

MILLIONAIRE—Lavender pink. Decorative. **50c.**

MAYERBEER—Crimson pink. Decorative. **35c.**

M. BOUCHON—Pink and white. Cactus. **25c.**

MERRITT—Very attractive yellow. Decorative. **$1.00.**

PATAPSCO—Beautiful Orchid pink. Cactus. **50c.**

PRIDE OF CALIFORNIA—Beautiful red. Decorative. **25c.**

PATRICK O'MARA—Large orange buff. Decorative. **35c.**

QUEEN MARY—Beautiful silvery-pink. Decorative. **25c.**

ROTARION—Bright maroon. Large flower. Decorative. **50c.**

DOUBLE PEARL TUBEROSES

One of the most fragrant and beautiful of the Summer flowering bulbs. By skillful management a succession of flowers may be obtained all the year round. For early flowers they can be started in February or March in the greenhouse or hotbed, and for a succession they can be planted at intervals as late as July. For flowering in the open border plant about the middle of May, or as soon as the ground becomes warm. **Each, 5c; dozen, 50c.**

GLADIOLUS

AMERICA—One of the best for cutting or bedding; color a beautiful shell pink; orchid-like in its colorings and textures. **Each, 7c; dozen, 75c.**

AUGUSTA—A lovely and useful variety; pure white with blue anthers. **Each, 7c; dozen, 75c.**

BRILLIANT—Glowing orange-scarlet with carmine and white throat. **Each, 10c; dozen, $1.00.**

FIRE KING—Large flowers of vivid scarlet with garnet throat blotch on lower petals. **Each, 10c; dozen, $1.00.**

FLAMBEAU—Immense flowers of vivid orange-scarlet with throat blotch of white, shaded and marked with Tyrian Lake on the lower petals. **Each, 15c; dozen, $1.50.**

GLORY—Large round flowers, the edges of the petals being daintily frilled or ruffled. The coloring is creamy blush, lightly tinted carmine rose; throat yellowish overlaid with purplish-carmine blotches on lower petals. **Each, 5c; dozen, 50c.**

NIAGARA—A splendid variety for cut flowers; color a delicate creamy yellow, lightly marked and splashed with rosy carmine in the throat. **Each, 10c; dozen, $1.00.**

KLONDIKE—Clear yellow with crimson-maroon blotch in the throat **Each, 7c; dozen, 75c.**

PEACE—Beautiful large flowers, white with claret blotch on lower petals and pale featherings. **Each, 10c; dozen, $1.00.**

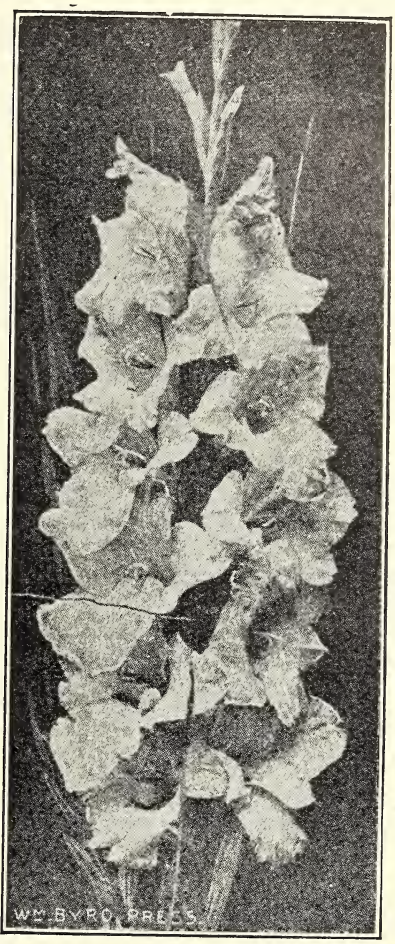
SCRIBE—A giant-flowering, soft rose blazed with carmine; very large open flowers and enormous spike. **Each, 10c; dozen, $1.00.**

SHAKESPEARE—White, suffused with carmine-rose; large rose blotch **Each, 10c; dozen, $1.00.**

SULPHUR KING—A beautiful clear yellow, with long spikes. **Each, 20c; dozen, $2.00.**

MIXTURES OF GLADIOLI

	Dozen.	100
Chilosii—All colors mixed	$0.50	$4.00
Lemoine's Mixture	.40	3.00
W. D. Co.'s Choice Mixed	.50	4.00



Gladiolus

CALADIUM ESCULENTUM
(Elephant's Ear)

Mammoth Bulbs—10 to 12 inches in circum..**25c each; $2.50 dozen**
First Size Bulbs—8 to 11 inches in circum....**20c each; $2.00 dozen**
Second Size Bulbs—7 to 9 inches in circum...**15c each; $1.75 dozen**
Third Size Bulbs—5 to 7 inches in circum....**10c each; $1.00 dozen**

Caladium Esculentum (Elephant Ears)

We can supply, in season, other roots and plants as follows: Hydrangea, Palms, Petunias, Roses, including all sorts such as Hybrid-Tea, Hybrid-Perpetual, Memorial, or Evergreen, Ramblers, etc., Alyssum, Bellis Perennis, Campanulas, Carnations, Centaurea, Chrysanthemums, Coreopsis, Delphiniums, Digitalis, Ferns, Geraniums, Hollyhocks, Peonies, Phlox, Salvia, Sweet William, Tritoma, Clematis, Honeysuckles, Hardy English Ivy, Hardy Jasmine, Wistarias, etc.

Will be pleased to quote prices on any of the above on application.

NURSERY DEPARTMENT

APPLES

SUMMER

WILLIAM'S EARLY RED—Early summer. Rapidly gaining in popularity. Red, with more or less deep yellow. Early and profuse.

EARLY HARVEST—Medium; pale yellow; tender, juicy.

GOLDEN SWEET—Large; pale yellow; very sweet.

DELICIOUS—Red, with more or less deep yellow. Early and profuse bearer. Of good size and of the finest quality.

RED ASTRACHAN—Large; beautiful deep crimson

WINTER

BALDWIN—Large; bright red; juicy, crisp, sub-acid. One of the most popular Winter Apples. January to April.

STAYMAN'S WINESAP—Winter; deep purple red; high quality; very prolific.

FALLAWATER—Very large, globular; yellowish-green, dull red cheek; juicy, crisp, pleasant sub-acid flavor. December.

GOLDEN RUSSET—Vigorous growth; medium; russet; crisp, juicy, mild sub-acid; hardy; very good; long keeper. Ripening November to April.

GRIMES' GOLDEN—Medium to large, cylindrical; golden yellow, sprinkled with gray dots; flesh crisp, tender, juicy, sprightly. Very good to best. Tree hardy, vigorous, productive, bears early. January to April.

JONATHAN—Late winter; fruit very round, of medium size, skin yellow, nearly covered with a lively red; fine grained and of a fine flavor, but quite acid.

AUTUMN

DUTCHESS OF OLDENBURG—Good size; yellow, streaked red; juicy, rich, sub-acid, productive.

FALL PIPPIN—Large; yellow; rich, aromatic.

GRAVENSTEIN—Large; striped; fine quality; one of the best Fall sorts.

YORK IMPERIAL—Medium to large; greenish yellow, nearly covered with bright red; flesh firm and juicy.

PRICES—Two year old trees: **Each $1.25; dozen $12.00; hundred $80.00.**

CRAB APPLES

EXCELSIOR—Tree a strong grower, hardy and healthy. Fruit large for a Crab Apple and very attractive; flavor agreeable.

HYSLOP—Almost as large as Early Strawberry; apple deep crimson; very popular on account of its large size, beauty and hardiness. Vigorous. October to January.

MARTHA—A new variety; a seedling of the Dutchess of Oldenburg. Resembles the Transcendent, but larger; beautiful showy fruit and bears enormously. All things considered, we doubt if it has an equal among the Crabs. Vigorous. September and October.

TRANSCENDENT—Skin yellow, striped with red; flesh crisp and juicy. An early and heavy bearer. One of the best known varieties. Vigorous. September and October.

WHITNEY—Large; glossy green, striped, splashed with carmine; flesh firm, juicy, and flavor very pleasant; ripe latter part of August. Tree a great bearer and very hardy; a vigorous grower, with a dark green, glossy foliage. Vigorous. August.

Price.....Each, **$1.25** Dozen, **$12.00**

PEARS

Our Pear Trees are grown on heavy clay soil, especially well adapted to the production of strong, vigorous stock. No better trees can be grown.

BARTLETT—Large; buttery, juicy, high flavored; great bearer; very popular. August and September.

CLAPP'S FAVORITE—Early summer. Green with red cheek; large, juicy, melting; prolific; decays quickly when ripe.

WORDEN SECKEL—A seedling of Seckel. Fruit medium size, borne in clusters; juicy, buttery, fine-grained, with a flavor and aroma fully equal to that of its parent, which it surpasses in size, beauty and keeping qualities. Ripens in October, but will keep in good condition till December.

KOONCE—Medium to large, handsome; yellow; flesh juicy, sweet, spicy, good. Ripens with the earliest. Tree a strong grower, hardy and productive. August

KEIFFER—Its large size, handsome appearance and remarkable keeping and shipping qualities make it exceedingly profitable for market. October and November.

Price Pear Trees:	Each.	Doz.
4 to 5 feet.....	**1.50**	**15.00**

PEACHES

Trees are all grown free from insects, perfectly healthy, well-ripened wood, with splendid roots, all stored in frost-proof cellars beyond injury during the Winter.

Owing to a magnificent growing season, our Peach Trees have made up largely to the 4 to 6 feet grade; fine well-developed trees. The smaller grades and mail size will be scarce stock in many varieties.

Will be pleased to quote prices on large lots on receipt of list. Those desiring trees for orchard planting should place orders early.

Ad. Dewey, Alexander, Banner, Barnards, Beer's Smock, Belle, Capt. Ede, Carman, Chairs Choice, Champion, Crawford's Early, Crawford's Late, Crosby, Elberts, Engles' Mammoth, Fitzgerald, Foster, Globe, Gold Drop, Greensboro, Heath Cling, Hills' Chili, Kalamazoo, Lemon Free, Lewis, Marshalls, Matthew's Beauty, Mayflower, Mountain Rose, Niagara, Old Mixon Free, Prolific, Reeve's, Salway, Sneed, Stephen's, Stump, Triumph, Wheatland, William's Favorite, Wonderful and Yellow St. John—$1.00 each; **$10.00** per dozen.

PLUMS

BURBANK—The best and most profitable among growers for market; ripens 10 to 14 days after Abundance. Tree hardy, sprawling, vigorous grower, unequaled in productiveness; bears young. Fruit large, excellent quality; cherry red with lilac bloom. August. Each **$1.50**; dozen **$15.00.**

ABUNDANCE—(Botan.)—One of the oldest and best known Japanese varieties; hardy and productive. Fruit large, lemon yellow, with heavy bloom; good quality. August. Each **$1.50**; dozen **$15.00.**

BRADSHAW—Early. Purple with bloom; very large; reliable, but of only fair quality.

GRAND DUKE—A large purple variety that does not rot upon the tree. Ripens late.

LOMBARD—Midseason. A very reliable and popular variety; it is very prolific.

Prices—Two year old trees: Each **$1.50**; dozen **$15.00.**

QUINCES

CHAMPION—Late. Greenish yellow; large.

ORANGE (Apple)—Early. Deep yellow, large.

First Class Trees: Each **$1.50**; dozen **$12.50.**

RASPBERRIES

CUTHBERT—Berries of large size, deep crimson, moderately firm and of high quality. **$1.25** dozen; **$6.00** per hundred.

GOLDEN QUEEN—Of lucious quality and a valuable variety for the home garden, though not red, we class this with the red varieties, as it is of the same habit and requires the same culture. **$1.25** dozen; **$8.00** hundred.

CUMBERLAND—Very large, jet-black berries, o superb quality. **$1.50** dozen; **$8.00** hundred.

ST. REGIS—The bright red berries, though not as large as some, are of fine quality and are produced in tremendous quantities not only in early summer, but also throughout the fall and right up to freezing weather. **$1.25** dozen; **$6.00** hundred.

CHERRIES

HEART and BIGARREAU

BLACK TARTARIAN—Very large; bright purplish black; half-tender, juicy, very rich, excellent flavor; productive. First to middle of July.

GOV. WOOD—One of the best Cherries; very large; light yellow, marbled with red; juicy, rich and delicious. Tree healthy and a large bearer. Hangs well on the tree. Vigorous. Last of June.

NAPOLEON BIGARREAU—Very large; pale yellow or red; very firm, juicy and sweet; very productive; one of the best. Vigorous. First of July.

WINDSOR—Fruit large; liver colored, resembling the Elkhorn, ripening a few days after that variety; flesh remarkably firm, of fine quality. Tree hardy and prolific. Vigorous. Middle of July.

YELLOW SPANISH—Large; pale yellow, with red cheek; firm, juicy and excellent; one of the best light-colored cherries; productive. Last of June.

DUKE and MORELLO

EARLY RICHMOND—Medium size; dark red; melting, juicy, sprightly, acid flavor. This is one of the most valuable and popular of the acid cherries; is unsurpassed for cooking purposes, and is exceedingly productive. June.

ENGLISH MORELLO—Medium to large; blackish red; rich, acid, juicy and good; very productive. Moderate. August.

MAY DUKE—Large; dark red; juicy and rich; an old, excellent variety; productive. Middle of June.

MONTMORENCY—A large red, acid cherry, larger than early Richmond and fully 10 dys later. Very profitable. Early Richmond hangs in clusters and is more liable to rot. Last of June.

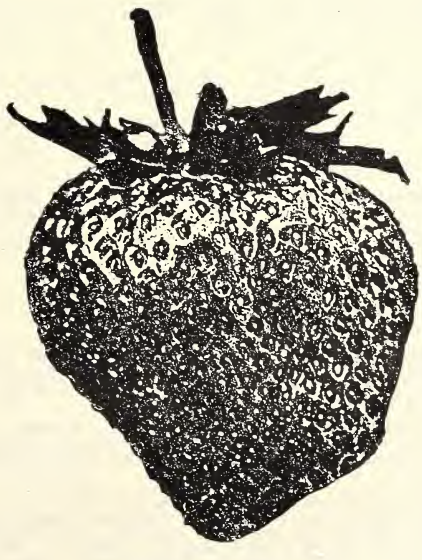
Price Cherries.....Each, **$1.75.** Dozen, **$17.50**

STRAWBERRIES

Strawberries will succeed in any soil that is adapted to ordinary farm or garden crops. Soil should be thoroughly prepared to a good depth, well drained and enriched. Vegetable manure (muck, rotten turf, wood soil, ashes, etc.) is the best. For field culture, set in rows 3 to 3½ feet apart, 15 to 18 inches in rows; for garden, 15 inches apart each way, leaving pathway every third row. To produce fine, large fruit, keep in hills, pinching runners off as soon as they appear. Ground should always be kept clean and well cultivated. In Winter a covering of leaves, straw or some kind of litter will protect the plants. Do not cover them until ground is frozen or so deep as to smother the plants, and remove covering before growth starts in Spring. Mulching will keep the fruit clean and the soil in good condition through the fruiting season.

NICK OHMER—Very large and stocky, sending out plenty of very strong runners, probably not surpassed in healthy, vigorous growth and productiveness by any variety. The fruit is of the largest size, never misshapen. Its only departure from the regular roundish conical form is when, under high culture, it is somewhat triangular. It is dark, glossy red, firm and of excellent flavor.

BRANDYWINE—A fine, large, late, handsome, productive berry of excellent quality; regular conical form; dark, glossy red, extending to the center. Plant healthy and vigorous; abundant producer. An extra-good sort for all purposes.



Brandywine Strawberry.

WM. BELT—A large, handsome, productive berry for market or home use. Vigorous, thrifty, heavy plant, producing large crops under good common matted row culture. Berries extra large, conical, quite uniform in shape, brilliant glossy red; ripens all over without green tips; good quality; carries well to market and brings highest price. One of the best varieties.

HAVERLAND—(P.)—A fine grower, very productive. One of the leading early market sorts. Berries bright red, large, long, uniform; medium size and quality.

GANDY—A reliable late variety; berries bright crimson, very uniform in size and shape, large and firm; plants vigorous and healthy.

SENATOR DUNLAP—Very productive; large, bright, or slightly dark red. Quality the very best.

GLEN MARY—A fine, large, late berry of excellent quality.

STEVENS' LATE CHAMPION—Large, light red berries, pointed globular; regular and perfect in form; very firm and of extra-high quality. An ideal plant to produce large berries and yield an enormous crop.

Price any above layer plants:

Per 100.....**$1.50** Per 1,000.....**$12.00**

BLACKBERRIES

We handle no suckers, offering only strong, vigorous, heavily rooted plants, grown from root cuttings.

Prices of Blackberries:	Per Doz.	Per 100
Blowers	**$1.50**	**$7.50**
Early Harvest	**1.50**	**7.50**
Eldorado	**1.50**	**7.50**
Rathburn	**1.50**	**7.50**
Snyder	**1.50**	**7.50**
Wilson	**1.50**	**7.50**

GRAPES--2 year

Price of Grape Vines:	Each	Per Doz.
Concord	**$ .50**	**$4.50**
Catawba	**.50**	**4.50**
Delaware	**.50**	**4.50**
Moore's Early	**.50**	**4.50**
Niagara	**.50**	**4.50**

PLUMS

Plant 20 feet apart each way. First-class trees: Each **$1.50**; dozen **$15.00.**

ABUNDANCE (Japanese)—Early. Amber, much covered with carmine. Very juicy and of excellent quality; heavy annual bearer. Best and most reliable Plum for New Jersey.

BRADSHAW—Early. Purple with bloom. Very large; reliable, but of only fair quality.

BURBANK (Japanese)—Ripens late in August. Inclined to overbear, but when properly thinned produces fruit of immense size. Cherry-red with deep yellow flesh, sweet, meaty.

GRAND DUKE—A large purple variety that does not rot upon the tree. Reliable, valuable. Ripens late.

LOMBARD—Midseason. A very reliable and popular variety. It is very prolific.

GOOSEBERRIES

DOWNING—Large, handsome, pale green and of splendid quality for both cooking and table use; bush a vigorous grower, and usually free from mildew. **50c** each; **$5.00** dozen.

HOUGHTON'S—Small to medium, roundish, oval; pale red; sweet, tender; very good; plants spreading; shoots slender, enormously productive. **50c** each; **$5.00** dozen.

INDUSTRY—Berries of largest size, excellent flavor, pleasant and rich; dark red color when fully ripe. Strong upright grower; an immense cropper, less subject to mildew than most of the foreign varieties. The best known and most successful English sort. **50c** Each; **$5.00** dozen.

CURRANTS

FAY'S PROLIFIC—The leading market variety. Extra-large stems and berries, uniform in size; easily picked; exceedingly productive. No variety ever made as quick a jump into popular favor, the demand most seasons being in excess of the supply. **50c** each; **$5.00** dozen.

CHERRY—Berries sometimes more than half an inch in diameter; bunches short; vigorous and productive when grown on good soils and well cultivated. **50c** each; **$5.00** dozen.

COMET—The bunches are almost approaching grapes in size, being frequently 8 inches in length, with from 20 to 26 berries of enormous size and of the most brilliant crimson color. The growth is abnormally vigorous. It will hang a long time in good condition. The first picking has been made as soon as the 10th of June and the last as late as the 22d of August during 3 seasons from the same bushes. **50c** each; **$5.00** dozen.

HEDGE PLANTS AND EVERGREENS

Evergreen must be handled with care; the roots should not be allowed to dry out. Plants for hedges should be placed about 12 inches apart, more space being allowed for larger plants. California Privet, Honey Locust and Osage Orange are generally planted in double rows about 9 inches apart. Other deciduous shrubs for hedges should be planted about 12 inches apart.

Arbor Vitae (American), Pine (Austrian), Arbor Vitae (Siberian), Pine (Scotch), Mahonia Aquifolia, Norway Spruce, Tree Box (in variety), Dwarf Box.

Berberis Thunbergii, Buckthorn, Honey Locust, Japan Quince, Osage Orange, Privet (California), Rosa Rugosa, Spireas, Tamarix, Thorn (Coccinea), Thorn (Crus Galli).

Price on Hedge Plants and Evergreens on application

SPRAY CALENDAR

WHAT TO SPRAY	FOR WHAT TO SPRAY	WITH WHAT TO SPRAY	When to Spray			REMARKS AND CAUTION
			First Spraying	Second Spraying	Third Spraying	
Apple	Codling Moth	Arsenate of lead 3 lbs. to 50 gals.	As soon as blossoms fall	7 to 10 days later	30 days later	Later spraying if made should be made with diluted solutions
	San Jose Scale	Lime-Sulphur	Late in fall, late in winter or early in spring			Use Lime-Sulphur only when trees are dormant
	Scab	Lime-Sulphur	Just before blossoms open	Within a week after blossoms have dropped	Same 7 to 10 days later	The spray just before blossoms open is very essential for scab
	Woolly Aphis	Kerosene Emulsion Black Leaf 40	When trees are in full leaf	In fall		Don't use strong emulsion when trees are in full leaf
Asparagus	Asparagus rust	Bordeaux or Pyrox	After cutting crop	10 days later	10 days later	Repeat 3 to 4 times. Burn rusted brush in the fall
Bean	Mexican Bean Beetle	Niagara-Dust	On 2 or 3-inch plants	10 days later	After blossoms	See page 45
Cabbage and Cauliflower	Cabbage Worm	Pyrethrum or Pyrox	With first appearance of worms	Whenever worms are observed	Same	1 oz. to 30 gals. of water
Cherry	Rot	Bordeaux or Pyrox	Before blossoming	After blossoming drop on fruit	Two weeks later on fruit	When fruit is large
	Curculio	Arsenate of lead	Before blossoming	As blossoms dry up	One week later	Avoid strong solutions. Do not use other arsenicals than arsenate of lead
Cucumber	Cucumber Beetle	Arsenate of lead in Bordeaux	Soon as plants appear	Week later	Week after second	Week after fourth
Currant	San Jose Scale	Lime-Sulphur	As with apple	In spring as with apple		
	Worm	Pyrox	When worms first appear	Repeat in 3 or 4 days	Repeat as second	Look for worms on under side of leaves first
Gooseberry	Mildew	Bordeaux	Before blossoms open	After blossoming	Two weeks later	
	Worm	Pyrox or Bordeaux	As on Currants			
Grape	Anthracnose Downy and Powdery Mildew and Rot	Bordeaux	Just before buds open	Just before blossoming	Just after fruit has set	
			Just before blossoming	Just after fruit has set	7 to 10 days after	Follow by two or three sprayings
Peach	Leaf Curl	Bordeaux	In fall or spring	As buds are opening	Just after calyx drops	
	Rot and Scab	Bordeaux	As buds are swelling	Just after calyxes drop	2 t 3 weeks later	Destroy all mummies
	Bud Moth	Arsenates in Bordeaux	With opening of buds			Use only half usual amount of poison
	San Jose Scale	Lime-Sulphur	In late fall or early spring			
Pear	Scab	Pyrox, Bordeaux	When leaves are half grown	After blossoms drop		
	Codling Moth	Arsenates in Bordeaux	As with Apple	Same as first		See Apple
	San Jose Scale	Lime-Sulphur	In fall or early spring			
Plum	Rot	Pyrox, Bordeaux	As buds are swelling	Just after calyx drops	3 or 4 weeks later	Repeat every 7 or 10 days
	Curculio	Arsenate of lead in Bordeaux	With starting of buds	Just after calyx drops	5 days later	Destroy all mummies
	San Jose Scale	Lime-Sulphur	In late fall or early spring			Jar, gather and destroy curculios and stung plums
Potato	Early Blight	Pyrox, Bordeaux	When plants are 6 inches high	Two weeks later	Two weeks later	
	Scab					Soak seed 90 minute in solution of corrosive sublimate 2 oz. to 16 gallons of water
	Colo. Beetle	Bordeaux or Pyrox	When beetles or young appear	As for first		
Quince	Fruit and Leaf Spot	Bordeaux, Pyrox	Just before blossoms open	After blossoms drop	Two weeks later	
	San Jose Scale	Lime-Sulphur	In late fall or early spring			
Raspberry and Blackberry	Anthracnose	Bordeaux	Before leaves open	Bord. on canes 6 inches high	Repeat second 1 week later	Keep spray from leaves on bearing cane
Rose	Leaf Spot	Bordeaux	With first appearance of fungus	2 or 3 weeks later	Repeat if necessary	
	Slug	Arsenites in Bordeaux or Hellebore	On appearance of of slugs	Repeat if necessary		
Strawberry	Leaf Spot	Bordeaux, Pyrox	On new growth after crop	2 or 3 weeks later		
Tomato	Anthracnose	Bordeaux, Pyrox	Soon after fruit begins to set	3 weeks later	3 weeks later	

Spraying acts as a preventive rather than a cure. Best protection is obtained by spraying early and often. Don't wait until insects and diseases have become serious. Remember: "An ounce of prevention is worth a pound of cure."

INSECT DESTROYERS

ARSENATE OF LEAD (Powdered)

Kills Coddling Moth, Worms, Caterpillars, Potato Bugs and all Chewing Insects. Dilute 1 lb. to 1½ lbs. to 50 gallons water. **1 lb. pkg. 25c; 4 lb. pkg. 22c per lb.; 100 lb. pkg. 20c per lb.**

ARSENATE OF ZINC (Powdered)

Kills quicker than Arsenate of Lead. Can also be used at sufficient strength to insure results without injury to the plants. Dilute 2 lbs. to 50 gallons water. **1 lb. pkg. 25c; 4 lb. pkg. per lb. 23c; 100 lb. pkg. per lb. 21c.**

ATOMIC SULPHUR (Paste)

Atomic Sulphur is a yellowish paste containing 45 per cent pure sulphur. A remedy for Scab and Brown Rot on Peaches. **25 lb. kegs $3.75; 100 lb. Drums $10.00.**

BLACK LEAF 40

For spraying against sucking insects, such as Green and Woolly Aphis, Pear Psylla, Grape Leaf Hopper, Pear Thrip, etc. **1 oz. bottle, 35c; ½ lb. can $1.25; 2 lb. can $3.50; 10 lb. can $13.50.**

BORDEAUX MIXTURE (Powdered)

For blight on Potato, Tomato, Celery Plants, Trees, etc. Also for other fungus diseases. **1 lb. pkg. 25c; 4 lb. pkg. per lb. 17c; 100 lb. pkg. per lb. 15c.**

CALCIUM ARSENATE (Powdered)

For use on hardy plants, such as Cotton, Tobacco, Potatoes, Tomatoes and Grapes, Contains a higher percentage of Arsenic Oxide than is contained in Arsenate of Lead. **4 lb. pkg. per lb. 15c; 100 lb. drums per lb. 14c.**

CARBOLA

Disinfecting Germ-Killing White Paint. Recommended for use instead of whitewash and disinfectants in Stables, Cellars, Poultry Houses, Hog Pens, Creameries, Dog Kennels, etc. **5 lb. pkg. 75c; 10 lb. pkg. $1.25; 25 lb. pkg. $2.85; 50 lb. pkg. $5.00; 200 lbs. $18.00.**

CYANOGAS (Calcium Cyanide)

A valuable insecticide for Green House Fumigation, for destroying Aphis, White Fly, Soft Scale, Thrips, etc. It is scattered along the walks, and the house closed for the night. **1 lb. 75c; 5 lbs. $3.00.**

DERRISOL (Non-Poisonous)

A highly concentrated, non-poisonous, brownish liquid, containing 5% Derris Extract combined with other chemicals in such a way as to make an efficient contact insecticide. Full directions on each package. **1 oz. bottle 35c; ½ lb. bottle $1.20; 1 lb. can $2.00; 2 lb. can $3.00; 10 lb. can $12.00.**

DRY LIME SULPHUR

Used extensively for Scale and Leaf Curl of Peaches. **1 lb. pkg. 25c; 5 lb. pkg. $1.00; 10 lb. pkg. $1.75; 25 lb. drum $3.75; 50 lb. drum $7.00; 100 lb. drum $12.00; 200 lb. drum $20.00.**

FISH OIL SOAP

An excellent summer spray, when something stronger cannot be used where San Jose Scale exists. **1 lb. 25c; 5 lbs. $1.00; 10 lbs. $1.75; 25 lbs. $3.75; 100 lbs. $10.50.**

FORMALDEHYDE

It is of pronounced efficiency in destroying disease germs affecting both animal and plant life, and is successfully employed as a preventive of such fungoid diseases as Potato Scab, Onion and Grain Smuts. The dilution for most purposes is 1 pound (1 pint) to 15 or 20 gallons of water. **1 pt. bottle 60c; 1 qt. bottle $1.00; 1 gal. can $3.50.**

LEMON OIL CO.'s STANDARD INSECTICIDE

Highly recommended to florists and others to destroy Scale, Mealy Bug, Rust, Aphis, Caterpillar, etc., on Palms, Rose Bushes, Rubber Plants, Ferns, etc. Free from disagreeable odor. Non-Poisonous. **½ pt. 35c; 1 pt. 60c; 1 qt. $1.00; ½ gal. $1.75; 1 gal. $3.00.**

LIME SULPHUR SOLUTION (Liquid)

For Scale on Trees and Shrubs, and such fungus diseases as can be treated in winter or early spring. Also for Leaf Curl of Peaches.

1 gal. can	**$ .75**
5 gal. can	**3.00**
10 gal. can	**4.50**

50 gal. drums, **20c per gal.**

Drums Not Returnable

INSECTICIDES CONTAINING POISON CANNOT BE SENT BY PARCEL POST

See Page 23 For "Wisdom" Tomato

INSECT DESTROYERS-Continued

NIAGARA DUSTING MATERIALS

STANDARD MIXTURES

PROMODUST

Standard Sulphur Fungicide with Lead Arsenate for diseases and chewing Insects on apples, pears, cherries, plums, etc. Very effective in the control of Rose Pests, also Mildew and Black Spot which is generally present on Roses as well as other flowering plants. **1 lb. 35c; 5 lbs. $1.00.**

FRUITEX

For diseases of apples, pears, etc.; Codling Moth, Strawberry Weevil, etc. **100 lbs. $11.00.**

SULFODUST

Standard Sulphur Fungicide without poison for Apple Scab, Brown Rot, etc. Also used in the South for Rust Mite and Red Spider. **100 lbs. $4.50.**

SUPER-SULFODUST

An Improved Sulphur Fungicide without poison for Apple Scab, Brown Rot, etc. Also used in the South for Rust Mite and Red Spider. **100 lbs. $5.00.**

95-5

For cherries, peaches, etc., where chewing insects are more easily controlled. **100 lbs. $7.00.**

80-10-10

For Brown Rot, Scab and Curculio on peaches and similar fruits. **100 lbs. $9.00.**

LARVODUST

For Leafroller on apples, Cabbage Worms, Potato Bugs, etc., containing extra heavy poison content. **100 lbs. $15.00.**

P-A DUST

For Aphids, Red Bug, Pear Psylla, etc., when severe infestations maintain; has higher nicotine content than A-1 Mixture. **100 lbs. $20.00.**

A-1 MIXTURE

For Aphids, Red Bug, Pear Psylla, etc. The best contact dust for sucking insects. **1 lb. 50c; 5 lbs. $1.50.**

VITIDUST

Standard Copper and poison dust for apples and grapes. **100 lbs. $11.50.**

SPECIAL 68

Same as Vitidust except contains less poison. **100 lbs. $11.00.**

D-6 MIXTURE

Standard Copper Fungicide without poison for potatoes, celery and other vegetable crops. **10 lbs $1.50; 25 lbs. $3.25; 100 lbs. $8.50.**

D-25 MIXTURE

Contains more Copper than the D-6 Mixture and used for potato dusting where severe blight conditions prevail. **100 lbs. $11.00.**

D-18 MIXTURE

Standard Copper Fungicide with poison for Potato Bugs and Blight. Very effective in controling the Mexican Bean Beetle. **5 lbs. $1.25; 10 lbs. $2.25; 25 lbs. $4.00; 100 lbs. $12.50.**

D-20 MIXTURE

Contains less poison than the D-18 Mixture and is for use where a weaker poison dust than D-18 is desired. Will also destroy the Mexican Bean Beetle. **5 lbs. $1.25; 10 lbs. $2.25; 25 lbs. $4.00; 100 lbs. $11.50.**

ALADUST

Mexican Bean Beetle Dust. Very effective for the control of the Beetle or Larve, which feed on the under side of foliage. **1 lb. 30c; 5 lbs. $1.25; 10 lbs. $2.00; 25 lbs. $3.75; 100 lbs. $8.50.**

NICO FUME PAPER

A tobacco paper insecticide for fumigating Greenhouses. Extensively used by Florists. **Box of 24 sheets $1.25; 144 sheets $5.50; 288 sheets $10.00.**

PARA DICHLORO BEZENE (Paracide)

This is a white crystalline product that gives off a gas that is especially deadly to the Peach Tree Borer and other insects. Apply to the soil around the base of the tree. Full directions on each package. **1 lb. pkg. 50c; 5 lb. pkg. $2.00; 25 lb. pkg. $7.50; 100 lb. pkg. 28c per lb.**

PARIS GREEN

A poisonous powder for Potato Bugs, Worms, Caterpillars, Slugs, etc. It may be used in liquid form 1 lb. in 50 gallons of water, or with land plaster at the rate of 1 lb. of Paris Green to 100 lbs. of plaster. **¼ lb. 15c; ½ lb. 30c; 1 lb. 50c; 2 lbs. 90c; 5 lbs. $2.00; 14 lb. kit 38c per lb.**

PYROX

A combined insecticide and fungicide for the control of leaf eating insects, blights and fungus troubles. This is in paste form and need only to be mixed with water. **1 lb. 50c; 5 lbs. $1.75; 10 lbs. $3.00; 25 lbs. $6.25; 50 lbs. $10.75; 100 lbs. $17.00.**

RED ARROW SPRAY

The powerful Non-Poisonous Spray, will not stain, burn, or discolor the tenderest leaf or petal. Harmless to man, pets or birds, but deadly to insects. Effective against Mexican Bean Beetle, Asparagus Beetle, Japanese Beetle, Cucumber Beetle, Cabbage Worms and many other insects.

1 oz. 30c makes 4 to 8 gallon.
½ pt. $1.75 makes 35 to 70 gallon
1 qt. $6.00 makes 140 to 280 gallon

SLUG SHOT

A non-poisonous powder. It requires no further mixing or preparation; easily applied; not injurious or dangerous to animals; the person applying it, or fruits or vegetables treated. For Potato Bugs, Worms, Caterpillars, etc. **1 lb. pkg. 20c; 5 lb. pkg. 50c;**

SULPHUR (Powdered)

Used principally in Greenhouses and also to prevent San Jose Scale. **1 lb. 10c; 5 lbs. 40c; 25 lbs. $2.00.**

INSECTICIDES CONTAINING POISON CANNOT BE SENT BY PARCEL POST

Give Your Seed The Advantage Over--

UNFAVORABLE WEATHER AND COSTLY BLIGHTING DISEASES

WILL damp, wet weather or destructive seed and plant diseases destroy half or more of the crop you have spent so much time and effort planting? Will your crop mature so late that you won't realize the best price for it?

You can minimize this costly uncertainty. There is no need to gamble with seed, soil and labor. Give your seeds a healthy, disease-free start. Help them resist unfavorable weather conditions and blighting diseases by using Du Pont SEMESAN. This remarkable seed and plant disinfectant generally increases germination and produces larger yields of finer crops.

SEMESAN treatments cost only from ¼c to 1c per pound of seed. Easily applied in *either dust or liquid* form. Harmless to the seed germ but deadly to the diseases that rob you of your crops and profits. Notice in the illustration below the difference in yield between the treated field on the left and the untreated field on the right.

SEMESAN is recommended by Government experts, agricultural colleges, county agents and large growers in every section of the country. You should be using this moderate-priced, effective crop protection.

SEMESAN DU PONT
Makes Seeds Healthy

CONTROLS DAMPING-OFF

And many Seed-Borne Diseases of Grains, Field Crops, Vegetables, Forage Crops, Flowers and Ornamentals. Use SEMESAN JR. for Corn and SEMESAN BEL for Potatoes.

PRICES

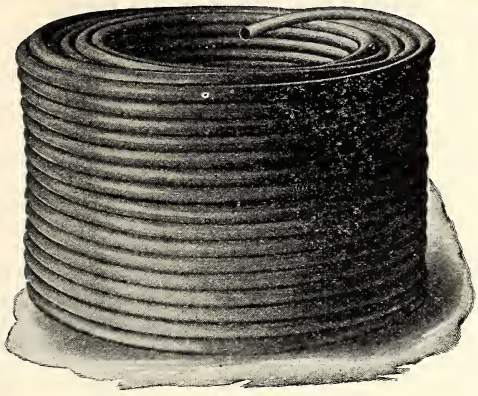
Semesan

2 oz.	$ .50	5 lbs.	$ 13.00
8 oz.	1.60	25 lbs.	62.50
1 lb.	2.75	50 lbs.	122.50
100 lbs.			$240.00

	Semesan Jr.	Semesan Bel
4 oz.	$ .60	$
1 lb.	1.75	1.75
5 lbs.	8.00	8.00
25 lbs.	37.50	37.50
50 lbs.	72.50	72.50
100 lbs.	140.00	140.00

SEND FOR CROP BOOKLETS

The crop booklets illustrated on the right are replete with the latest information on seed, plant, and soil diseases. They are profusely illustrated and contain complete instruction for applying SEMESAN Disinfectants.



PRESSURE HOSE

Molded Non-Kink Type

		Per Ft.
½ in.	2 Braid Amazon	**15c**
⅝ in.	2 " "	**16c**
¾ in.	2 " "	**18c**
⅝ in.	1 " Erie Cord	**15c**
¾ in.	1 " " "	**17c**
½ in.	3 " Amazon Spray Hose	**20c**

25 and 50 foot lengths Coupled Free
If to be sent by Parcel Post add 1c per foot to above price

We can supply from Stock the following sizes:
Water Hose, 1 in., 1¼ in., 1½ in., 2 in., 2½ in., 3 in.
Suction " 1 in., 1¼ in., 1½ in., 2 in., 2½ in., 3 in.
Steam " ½ in. to 2 in.

Prices on Application

ADJUSTABLE HOSE NOZZLE

Made of brass, nothing to get out of order. Can be adjusted to three different streams. For ¾ in. Hose **Price 75c; by P. P. 85c.**

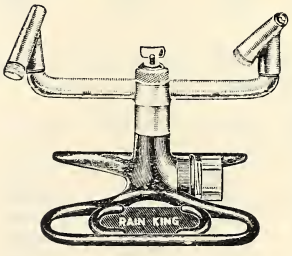
BRASS HOSE COUPLINGS

	Complete ½ in.	¾ in.	1 in.
	20c	**25c**	**35c**
By P. P.	**23c**	**28c**	**40c**

BRASS HOSE CLAMPS

½ in. **5c**; ¾ in. **5c**; 1 in. **15c.**

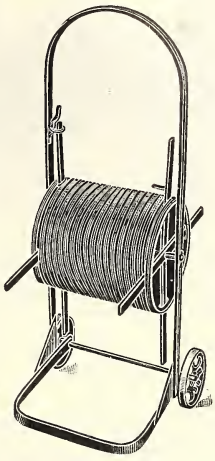
RAIN KING LAWN SPRINKLER



The Best Sprinkler Made

Waters a greater area. Fine or coarse spray. Revolving or stationary. Requires less pressure. Made entirely of brass except base. Cannot rust or stick. Has heavy bronze bearings, will last for years. Price, **$3.50, by P. P. $3.65.**

HOSE REELS



"Victor"

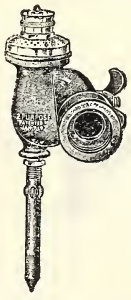
The **"Victor" Reel** is constructed with channel steel frame; strong, cast iron wheels; solid steel reel arm and 9-inch drum of heavy corrugated steel. Equipped with a ring on side of frame to prevent, when desired, the reel from unwinding; and with adjustable clip at top of frame for holding nozzle when spraying.

Frame enameled green, wheels and reel rack black, making a very attractive appearance.

Weight 12½ lbs., bundled for shipping. Capacity 75 ft. of ¾ in. rubber hose. Price, **$3.00.**

No. 2—Same as above except that it is heavier, stronger and of larger capacity. Also has an adjustable hose holder at top of frame which holds the nozzle in any position while spraying.

Weight 15 lbs., bundled for shipping. Capacity 100 ft. ¾ in. rubber hose. Price, **$4.00.**



Two Purpose

TWO PURPOSE NOZZLE

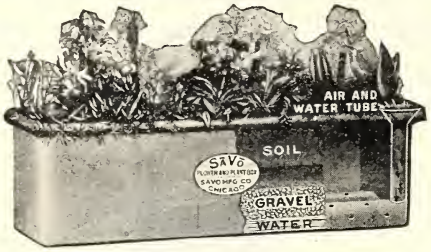
A combination hose nozzle and garden spray; gives any desired spray from a fine mist to a powerful compact stream. **$1.50; by P. P. $1.60**

THE NIAGARA LAWN SPRINLER

Made entirely of heavy brass, nothing to get out of order. Can be easily moved about the lawn without turning off the water. Makes a beautiful spray. **85c; by P. P. 95c.**

Plant The "Wisdom" Tomato (See Page 23)

THE SaVo STEEL FLOWER AND PLANT BOX



Self-watering and Sub-irrigating. For windows, porches, sun parlors, etc. Leak proof and rust proof. Fill with water once a week. No surface watering.

Price List of SaVo Flower & Plant Boxes and Stands

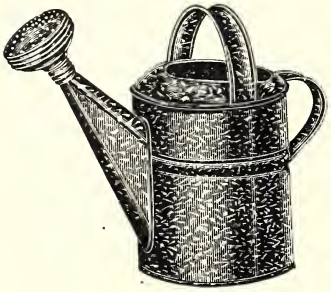
	High–inches	Wide–inches	Long–inches	Each
Model A..	8	9 ½	23	$3.00
Model B..	8	9 ½	29	4.00
Model C..	8	9 ½	35	4.50
Model D..	8	9 ½	41	5.00
Model E..	8	12	12	3.00
Model F..	12	12	12	3.50

Aluminum or Dark Pullman Green Finish

Model B with Portable Stand 29 inches long, 30 ½ inches high, complete 12.00

Model G Fernery complete, 12 inches diameter, 29 inches high 6.00

Dark Pullman Green Finish



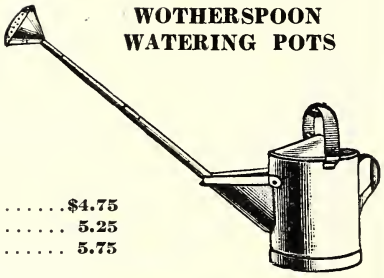
GALVANIZED WATER POTS

4 quart	$ .75
6 quart	.90
8 quart	1.00
10 quart	1.15
12 quart	1.25
16 quart	1.50

If wanted by Parcel Post add **25c** each to above prices.

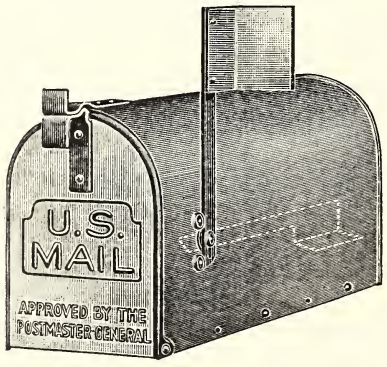
WOTHERSPOON WATERING POTS

Equipped with two nozzles for fine or coarse spraying. Very strong galvanized iron. Useful for greenhouse or hot bed work. Cannot be sent by parcel post.



8 qt.	$4.75
10 qt.	5.25
12 qt.	5.75

RURAL MAIL BOX No. 1



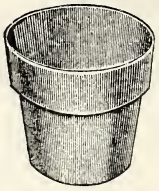
Made of galvanized steel, body 22 gauge, door 20 gauge; finished in aluminum bronze; letters in door are heavily embossed.

Size 18 ¼ in. long 6 ¼ in. high, inside measurements.

Price $1.25

By Parcel Post 1.45

EARTHENWARE FLOWER POTS



Width inside	Each	Doz.	100
2 inch	$ .02	$ .18	$ 1.02
2 ¼ "	.02	.18	1.16
2 ½ "	.02	.18	1.35
3 "	.03	.24	1.76
3 ½ "	.03	.29	2.16
4 "	.04	.36	2.70
4 ½ "	.06	.49	3.65
5 "	.07	.65	4.85
5 ½ "	.08	.81	6.08
6 "	.09	.98	7.29
6 ½ "	.13	1.30	9.72
7 "	.15	1.62	12.15
8 "	.22	2.34	17.55
9 "	.33	3.60	27.00
10 "	.45	4.86	36.45
11 "	.66	7.20	54.00
12 "	.91	9.90	74.25
14 "	1.48	16.20	121.50

EARTHENWARE SAUCERS

	Each	Doz.	100
4 inch	$ .03	$ .27	$ 2.00
5 "	.04	.36	2.75
6 "	.06	.54	4.00
7 "	.07	.72	5.25
8 "	.10	1.10	6.00
9 "	.12	1.25	8.00
10 "	.15	1.50	10.00
11 "	.20	2.00	14.00
12 "	.25	2.50	18.00
14 "	.27	2.75	20.00

We cannot pack Earthenware Pots and Saucers for Parcel Post.

Bird's IMPROVED NEPONSET Flower Pots

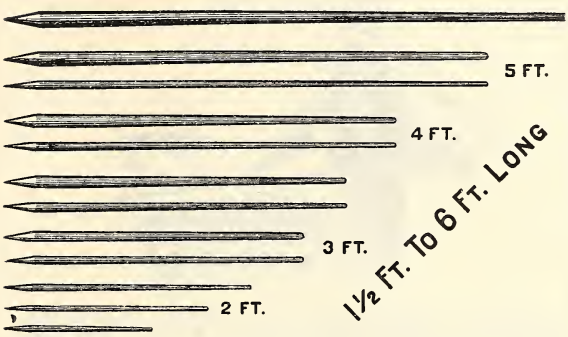
Used extensively in greenhouses and hot beds for starting seeds and seedlings.

Size	No. packed in case	Per doz.	Per 100	Per 1000
2 ¼ inch	1000	$.10	$.50	$3.75
2 ½ "	1000	.12	.60	4.50
3 "	1000	.15	.70	6.00
3 ½ "	1000	.20	1.00	7.50
4 "	500	.25	1.25	9.00
5 "	500	.30	1.75	14.00
6 "	500	.40	2.50	19.00

Dozen and 100 Lots Postpaid

1000 Lots Add 25c.

PLANT STAKES



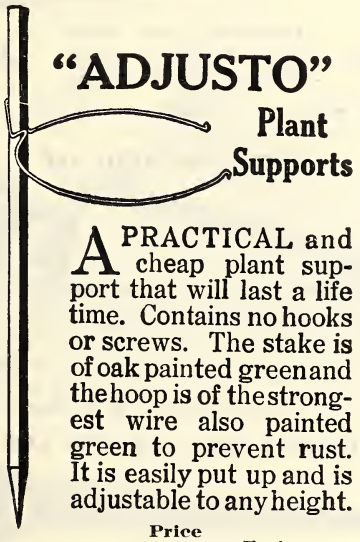
The most symmetrical stake on the market. Tapering, painted green.

Light Stakes

	Each	Dozen	Per 100
1½ feet long	.03	.25	$1.75
2 feet long	.04	.40	3.00
2½ feet long	.06	.60	4.25
3 feet long	.08	.75	5.75

Heavy Stakes

	Each	Dozen	Per 100
3 feet long	.12	$1.15	$9.00
3½ feet long	.14	1.35	10.00
4 feet long	.15	1.55	11.50
5 feet long	.20	2.25	15.00
6 feet long	.25	2.50	17.90



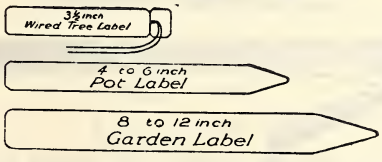
"ADJUSTO" Plant Supports

A PRACTICAL and cheap plant support that will last a life time. Contains no hooks or screws. The stake is of oak painted green and the hoop is of the strongest wire also painted green to prevent rust. It is easily put up and is adjustable to any height.

Price

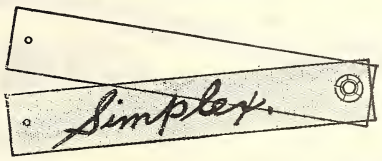
	Each	Hundred
3 feet long	.25	$20.00
4 feet long	.30	25.00
5 feet long	.35	30.00

POT AND TREE LABELS



	Per 100	Per 1000
4 x ⅝ in. Painted	.30	$1.85
4½ x ⅝ in. Painted	.35	2.10
5 x ⅝ in. Painted	.40	2.25
6 x ⅝ in. Painted	.45	2.65
3½ in. Copper Wired	.35	2.45

SIMPLEX WEATHERPROOF LABELS



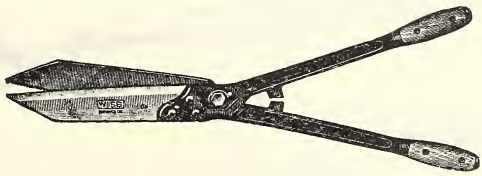
Simplex Weatherproof Labels are adapted for all outdoor garden records. The Plant Label is excellent for roses and other shrubs.

Prices—Including Copper Wires for Attaching.

	Dozen	Per 100
No. 1—3 x ½ inches	$ .50	$.300
No. 2—4 x ¾ inches	.75	5.00
No. 3—5 x 1 inches	1.00	7.00

If wanted by Parcel Post add **10c** per hundred

WISS HEDGE SHEARS



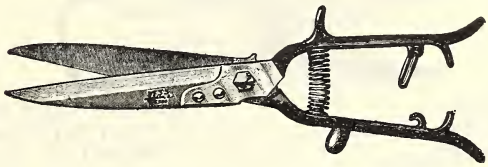
Made from best quality steel, with steel handles and wood hand grips. No more replacing handles. One blade serrated to prevent hedging slipping away. The name "Wiss" on a shear means "Quality."

Made in four sizes as follows:

6½ inch **$2.50** 8 inch **$2.75**
9 inch **$3.00** 10 inch **$3.25**

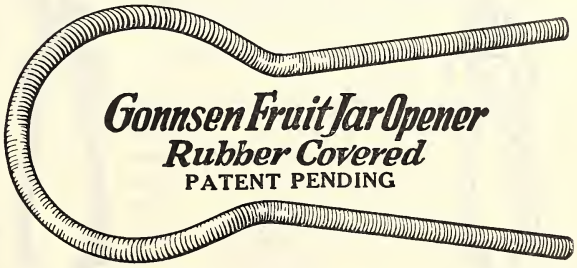
If wanted by Parcel Post add **20c** to above prices

WISS GRASS SHEARS



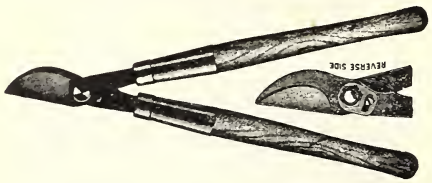
No. 500—This shear will meet the requirement of those desiring a "Real" shear. Handles slightly raised to prevent knuckles from scraping the ground. Brass spring. The same good quality that exists in all "Wiss" goods. Length 12½ inches. Price **$1.50; by P. P. $1.60.**

GONNSEN FRUIT JAR OPENER



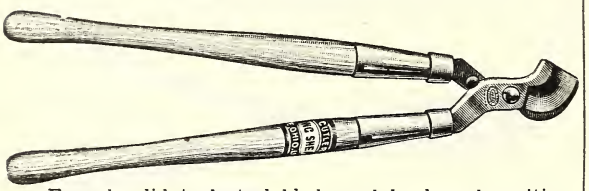
The gonnsen Fruit Jar Opener offers a grip that has not been duplicated by any other jar opener. It is an undisputed fact that rubber is the best non-slipping material known to science and The Gonnsen Fruit Jar Opener is rubber covered which means it is no longer necessary to grip a jar cap so tight that the procelain is broken, thereby getting particles of glass in the food, nor will its soft rubber surface puncture the metal cap, and even the jar rubber is saved. It works both ways making it indispensable in canning season for sealing jars air tight. Price **10c; by P. P. 15c.**

No. 230 CRONK TREE PRUNER



Made of the highest grade tool steel, carefully tempered and ground, hard wood handles, 24 inches long, 29½ inches over all; heavy ferrule; heavy blades for heavy work. Weight 3 lbs. 11 oz. Blades tapered off to point to allow cutting in close places. Price **$3.00; by P. P. $3.15.**

No. 5406 CLYDE PRUNING SHEAR

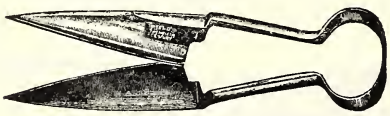


Forged solid tool steel blade and hook and positive shear cut. **Handles**—Northern second growth Ash polished 4-inch pressed steel ferrule and cap.

Price:

20 inch Handle.....**$1.75; by P. P. $1.95**
24 inch Handle..... **2.00; by P. P. 2.20**

GRASS SHEARS



No. 346.....**$ .50; by P. P. $ .60**
No. 358..... **.75; by P. P. .85**
No. 2000..... **1.00; by P. P. 1.10**

PRUNING SHEARS

The Pexto Pruners are made from the best quality tool steel and are fully guaranteed. If wanted sent by Parcel Post add 10c each to the following prices.

No. 50—8 inch.....**$1.00**
No. R 65—9 inch..... **1.75**
No. R 125—8½ inch... **3.00**
No. R 50—9 inch..... **1.25**
No. R 70—9 inch..... **1.75**
No. 14—Nickeled, 8½.. **1.50**

BUDDING AND PRUNING KNIVES

1 blade, cocoa handle, pruning, **$1.25; by P. P. $1.35.**

1 blade white handle, budding, **$1.50; by P. P. $1.60.**

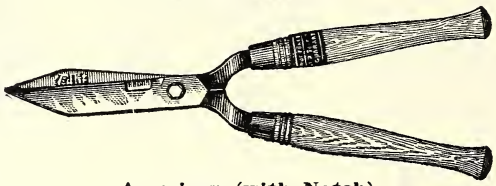
"LITTLE WONDER" HEDGE TRIMMER

This little machine is really a wonder. It does the work very much more rapidly and much neater than with the old style hedge shears. Makes hedge trimming a pleasure. Made in three sizes. 30 in., 40 in., 60 in.

Price

30 in.....**$25.00; by P. P. $25.50**
40 in..... **27.50; by P. P. 28.25**
60 in..... **35.00; by P. P. 36.00**

HEDGE SHEARS



American (with Notch)

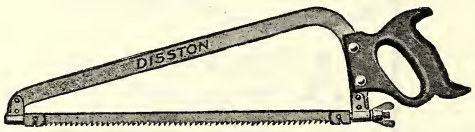
7 in.	8 in.	9 in.	10 in.	12 in.
$1.75	**$2.00**	**$2.25**	**$2.50**	**$3.00**

English (with Notch)

8 in.	9 in.	10 in.
$2.75	**$3.00**	**$3.50**

If wanted by Parcel Post add 20c to above prices.

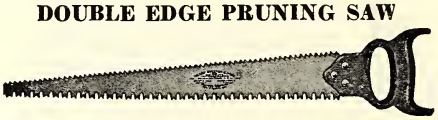
DISSTON PRUNING SAW



This is the most practical pruning saw made. Owing to its peculiar shape, being tapered off to a point permits cutting in between the limbs. The blade is adjustable and will cut at any angle desired and can be removed to replace a new one. Made of the best quality steel.

Price.....**$2.50; by P. P. $2.65**
Extra Blades **40c; by P. P. 45c.**

DOUBLE EDGE PRUNING SAW



Made of the very best material. One side has fine teeth and the opposite has coarse teeth.

Price

16 inch.....**$1.35; by P. P. $1.45**
18 inch..... **1.50; by P. P. $1.60**
20 inch..... **1.75; by P. P. 1.85**

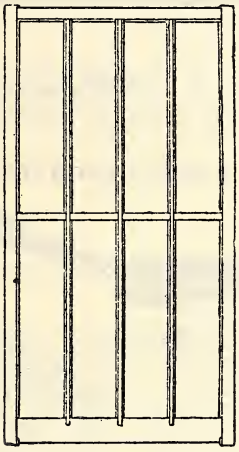
No. 5407 TREE TRIMMER

Both the blade and hook of this trimmer are made from the best tool steel, firmly riveted to selected Basswood handles. The sides of the hook extend down on to the handle for 6½ inches, making a firm bearing and an unusually strong connection with the pole.

6 feet.....**$1.75** 12 feet.....**$2.40**
8 feet..... **2.00** 14 feet..... **2.60**
10 feet..... **2.20** Extra Blades..... **.20**

The above tree trimmers are all on long handles and cannot be sent by Parcel Post.

HOT BED SASH



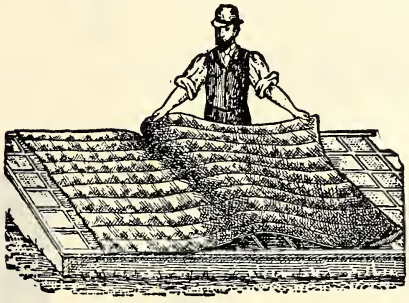
Made of the best white pine, well mortised and perfectly clear of knots. Two sizes to hold either 24 or 28 8 x 10 panes.

24 Light 28 Light

Price of Either Size, Unglazed, **$2.00 each**

Hot Bed Glass, 8 x 10, per box of 90 panes, **$3.00**

HOT BED MATS



Made of heavy burlap, interlined with wool.

Each

40″ x 76″ to Cover One Sash.....**$2.00**

76″ x 76″ to Cover Two Sashes..... **3.25**

Special Price by the Dozen

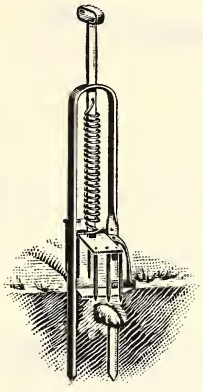
VAN REYPER GLAZING POINTS

Simple and positive. No rights or lefts. Per 1000, **60c. By Parcel Post 70c.**

LIGHTNING WIRE PLANT TIE

Takes the place of twine; can be used more quickly and many times. 1000 Tics in package, **$2.00.**
By P. P. $2.15.

REDDICK MOLE TRAP

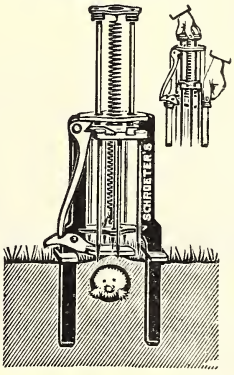


Reddick Traps sound "taps" for Mr. Mole and his burrowing family.

Extensively used in public or private parks, farms, schools, colleges, cemeteries, etc.

Entire Trap Double Tinned, Rust-Proof. Price **$1.25; by P. P. $1.35.**

SCHROETER No. 1 IMPROVED SELF SETTING MOLE TRAP



Frame is made of malleable iron. Prongs are of tool steel. High tension spring. Especially adapted for setting in hot beds. Just pull up spring and the lever drops into position and trap is set. Price **$1.75.**
By P. P. $1.85

GRANT FRUIT PICKING APRON

This consists of a canvas bag with straps which fasten over the shoulders much as an apron. Has a stout band at top of bag to keep it open while picking. The bottom being open and fastened up to apron with snap hooks. When ready to unload, simply loosen snaps and let fruit roll into basket. Made strong and durable. Price **$3.75. By P. P. $4.00.**

GRAFTING WAX

For use in grafting trees, and for tree wounds. **¼ lb. 15c, by P. P. 20c; ½ lb. 25c, by P. P. 30c; lb. 40c, by P. P. 45c.**

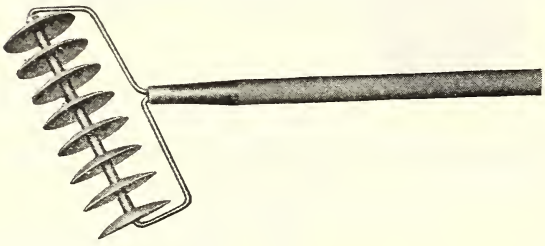
WIRE FRUIT PICKER

Well made and durable. Fruit can be picked without bruising. Made of No. 12 copperized wire. Will not rust. Price less pole **50c; by P. P. 60c.**

VICTORY GARDEN CULTIVATOR

A very handy garden tool. Strong and durable.
No. C5—4 ½ ft. Handle, 5 Adjustable Steel Blades, **$1.25**
No. C3—4 ft. Handle, 3 Adjustable Steel Blades, **1.00**

"GONNSEN" DISC CULTIVATOR



There are two reasons for cultivating plants. First—to kill weeds. Second—to produce a loose surface over the ground which breaks capulary attraction, thus preventing evaporation of soil mixture. This disc cultivator does both when pulled parallel with the handle which allows the disc to operate at an angle it cuts the weeds off just under the surfact and turns the dirt over. The dirt may be thrown toward or away from the plants. Thus by using convex side discs, the operator may work very close to small plants without injury to them and it is this secret of killing weeds while small that makes the kinds of gardens that are pictured in seed catalogues.
8-Disc (as illustrated) Price.....**$1.50**
4-Disc. For Flower Gardens, Price..... **1.00**

MAGIC "E-Z" WEEDER

Light in weight, strong in construction. An excellent tool. Three-time. Made of No. 8 ½ steel wire. Nicely trimmed. Black enameled handle.
Prices:
Small.....**20c; by P. P. 27c**
Large.....**25c; by P. P. 32c**

EXCELSIOR WEEDER

Has five fingers of heavy cast iron. Heavily tinned to keep from rusting. Black enameled handle. Price, **15c; by P. P. 22c.**

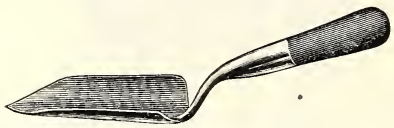
LANG'S HANDY WEEDER

Made of tool steel. Angle shape, excellent for loosening the soil around small plants and cutting out the weeds. Price, **30c; by P. P. 35c.**

SPEEDY CULTIVATOR

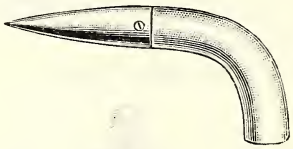
A superior tool for preparing ground for seeding and cultivating after the planting is done. 4 tines. 4½ ft. handle with riveted shank. Width across tines 5 inches and will dig to depth of 5 inches. No. 4-S.C. Price, **75c.**

GARDEN TROWELS



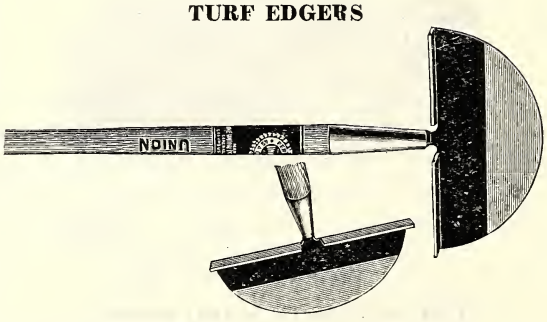
No. D.S.G.T.—As illustrated. Forged from one solid piece of bar steel. Solid socket. Blades 6 in. x 3 ½ in. Handles 6 in. long. Price **75c; by P. P. 83c.**
No. 809—Kingsbury All Steel Trowel. Blade 6 ¼ in. x 3 in. Steel handle. Price **25c; by P. P. 33c.**
No. 217—6 in. Planting Trowel. Steel blade. 5 ¼ in. x 1 ½ in. Wood handle. Price **15c; by P. P. 22c.**
No. 217—Planting Trowel. Steel blade 7 in. x 2 in. Wood handle. Price **25c; by P. P. 32c.**

DIBBLES



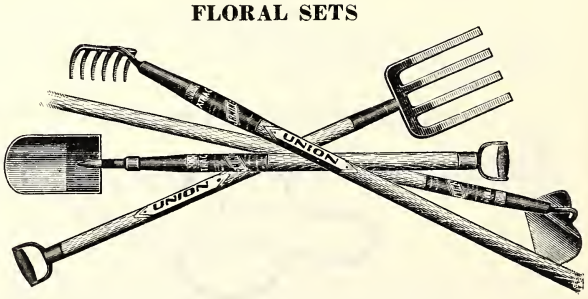
No. 218—Right Angle. Wood handle. Steel point. Price **25c; by P. P. 35c.**

TURF EDGERS



No. T.E.—Polished steel blade. Solid shank. 4 ft. handle. Bronze finish. Price **$1.00.**

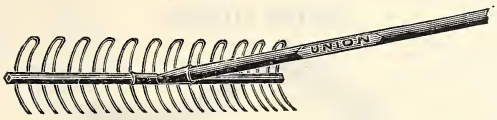
FLORAL SETS



Real honest to goodness tools, not play toys.
No.3FS—3 pieces, Shovel, Hoe and Rake. Price per set **$2.50.**
No. 4FS—4 pieces, Shovel, Hoe, Rake and Spading Fork. Price per set **$3.00.**

Spray Your "Wisdom" Tomato Plants Early (See Page 23)

WIRE LAWN RAKES



Heavy tinned steel wire; can be reversed as can be seen by the above cut. 21 inches wide, 24 teeth.

Price 75c

GARDEN RAKES

STEEL GARDEN RAKES

Forged from one solid piece of steel, teeth hammer drawn, single shanks, straight teeth.

No.	Description	
S10	10 teeth	$ .80
S12	12 "	.90
S14	14 "	1.00
S16	16 "	1.15
SC12	12 curved teeth	.90
SC14	14 " "	1.00
SC16	16 " "	1.15
B12 Bow Braced	12 " "	1.00
B14 " "	14 " "	1.10
B16 " "	16 " "	1.20

Malleable

MS10—Single Shanks	10 straight teeth	.50
MS12 " "	12 " "	.55
MS14 " "	14 " "	.60
MS16 " "	16 " "	.70

JAPANESE BAMBOO LAWN RAKE

The demand for a lawn rake that is light and durable, that will not dig up the grass like a steel rake is met in the Bamboo Lawn Rake. It is strongly made, easy to handle and because of its breadth quickly rakes up leaves and scraps from the lawn without harm to the grass.

33 Bamboo strips are spread fan shape and reinforced with wire and rattan, bent ends of bamboo strips form the teeth.

Securely bolted and clamped to handle. Bamboo handle 53 inches long, length over all 65 inches, weight about 1 lb. Price **$1.00.**

WOOD RAKES

24 Tooth, Wire Braced..... **75c**

OLE OLSEN WOOD LAWN RAKES

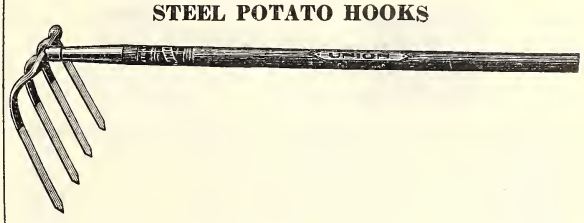
Made of best hard wood, well braced.

26-Toot, Hickory Wood..... **75c**

GARDEN HOES

No. YSGA—Socket. Polished Blade. 6, 7 and 8 in.. **$1.00**
No. YSGA—Shank. 6, 7 and 8 inch blade..... **.75**
No. HSMA—Mattock Hoe. Blade 3 in. on one side, 1 ½ in. on opposite side..... **1.25**
No. SPW—Single Point Weed Hoe..... **.40**
No. 2PW—Two Point Weed Hoe..... **.40**
No. W7—Pointed Warren Hoes, 7 in..... **1.00**
No. W7 ½—Pointed Warren Hoes, 7 ½ in..... **1.25**

STEEL POTATO HOOKS

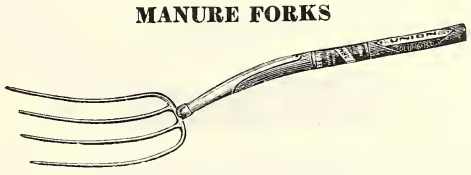


No. 4BOL—4 Light Oval Tines..... **$1.00**
No. 4BOH—4 Heavy Oval Tines..... **1.25**

SPADING FORKS

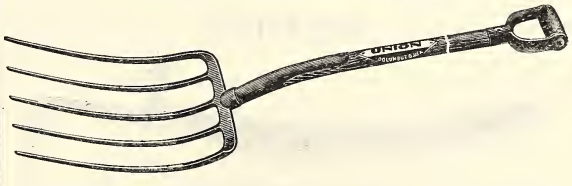
No. YSALD—Light. Strapped Ferrule..... **$1.50**
No. JSAW—Extra Heavy Jumbo..... **2.00**

MANURE FORKS



No. ZS44 ½—4 Tine. Strapped Ferrule. 4 ½ ft. Handle..... **$1.25**
No. S44 ½—4 Tine. Strapped Ferrule. 4 ½ ft. Handle..... **1.50**
No. 44—4 Tine. Batchelor Strapped Ferrule 4 ½ ft. Handle..... **1.60**

HEAVY MANURE FORKS



No. EHDM4—4 Tine. D-Handle, Strap Ferrule, Extra Heavy Angular Tine..... **$2.50**
No. EHDM5—5 Tine. D-Handle, Strap Ferrule, Extra Heavy Angular Tine..... **2.75**

LONG HANDLE SHOVELS

Ames No. 2 Round Point Long Handle.....**$1.90**
Chickasaw No. 2 Round Point Long Handle..... **1.50**

D-HANDLE SHOVELS

Ames No. 4 D-Handle Square Point.....**$2.00**
Ames No. 5 D-Handle Square Point..... **2.25**
Hercules No. 3 D-Handle Square Point **1.35**
Hercules No. 4 D-Handle Square Point..... **1.40**
Hercules No. 5 D-Handle Square Point..... **1.50**

LONG AND SHORT HANDLE SPADES

Ames No. 2 D-Handle.....**$2.25**
Ames No. 2 Long Handle..... **2.25**
Hercules No. 2 D-Handle..... **1.50**
Hercules No. 2 Long Handle..... **1.50**

MATTOCKS

Best Quality, without Handle.....**$1.25**
With Handle..... **1.50**

GRUB HOE OR HALF MATTOCKS

Without Handle.....**$1.00**
With Handle..... **1.25**

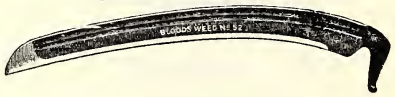
HAY KNIVES

LIGHTNING HAY KNIFE—$1.75; by P. P. $1.90
AMERICAN (Sickle Edge)—Can be adjusted right or left hand. **$2.00; by P. P. $2.20.**

GRASS SICKELS

No. 2 English Riveted Back.....**$ .75**
No. 3 English Riveted Back..... **.85**
No. 4 English Riveted Back..... **1.00**
No. 1½ Austrian..... **.60**
No. 7 American..... **.50**
If sent by Parcel Post, add 10c each to above prices.

GRASS AND BUSH SCYTHES



English T. Waldron, 34 to 36 in., grass.....**$2.75**
Swift Cutter, 32 to 36 in. grass..... **1.50**
Swift Cutter, 24 to 28 in. weed..... **1.50**
Swift Cutter, 18 to 22 in., bush..... **1.50**
Austrian, 36 in., grass..... **2.00**

SCYTHE SNATHS

No. 55 Patent Loop Grass Snath.....**$1.40**
No. 105 Patent Loop Bush Snath..... **1.50**
No. 100 Two Ring Bush Snath **1.50**

SCYTHE STONES

Round English..... **25c; by P. P. 35c**
Radiac—White Non-Breakable.... **25c; by P. P. 35c**
Radiac—Brown Non-Breakable.... **30c; by P. P. 40c**

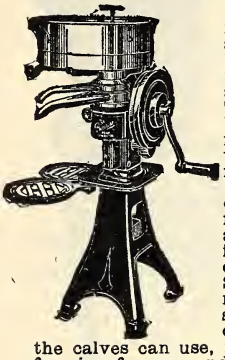
BUSH AND BRIER HOOKS

No. 1130—Axe Handle Bush Hook**$1.35; by P. P. $1.45**
No. 1137—Two Ring Bush Hook.. **1.35; by P. P. 1.45**

AXES

Collins specially tempered inserted steel bit. Weighs from 3½ lbs. to 5½ lbs. Price Handled **$2.00; by P. P. $2.25.**
Without Handle **$1.75; by P. P. $1.90**

CREAM SEPARATORS



How many men of average means in your neighborhood have built up a high producing herd of dairy cows by buying full grown stock? Not very many unless they were wealthy and kept fancy stock for pleasure. The man who keeps cows for profit breeds to pure blooded sires and raises his best heifer calves. In this way he improves his herd, keeps it free from disease, and saves money.

Just as good a calf can be raised on skim-milk as whole milk, so why feed butter fat at a thousand dollars a ton to a calf when you can replace it with equally good feed for thirty dollars a ton?

Separate the milk immediately after milking, sell the cream and feed the skimmilk, warm and sweet, to the calves. If there is more milk than the calves can use, it makes the best feed in the world for pigs, for corn and skimmilk will bring a pig to market weight quicker than any other ration.

A cream separator will provide ample skim-milk in the best possible condition for feeding, always the same temperature, always the same degree of acidity. It saves all the butter fat and delivers cream that brings the highest market prices, in the best condition for butter making. Let us send you a catalogue.

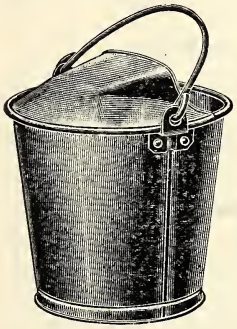
Sold in Four Sizes

No. 1—Guaranteed separating capacity, 350 pounds; 40.6 gallons of milk per hour. Price.....**$75.00**

No. 2—Guaranteed separating capacity, 450 pounds; 52.2 gallons of milk per hour. Price.....**$90.00**

No. 3—Guaranteed separating capacity, 650 pounds; 75.4 gallons of milk per hour. Price.....**$100.00**

No. 4—Guaranteed separating capacity, 850 pounds; 98.6 gallons of milk per hour. Price.....**$115.00**



MILKING PAILS

Sanitary Milking Pails, extra heavy, all seams soldered inside and outside.

The hood keeps impurities from dropping in the pail during milking. Approved by leading milk dealers and approved and strongly recommended by dairy inspectors.

12 qt. $1.90 **14 qt. $2.00**

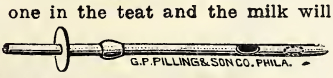
SANITARY MILK STRAINER

Heavy charcoal plate. With removable strainer. **Price $2.00.**

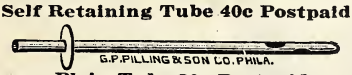
ASEPTIC MILKING TUBES

For Cows With Sore Teats

Insert one in the teat and the milk will flow.



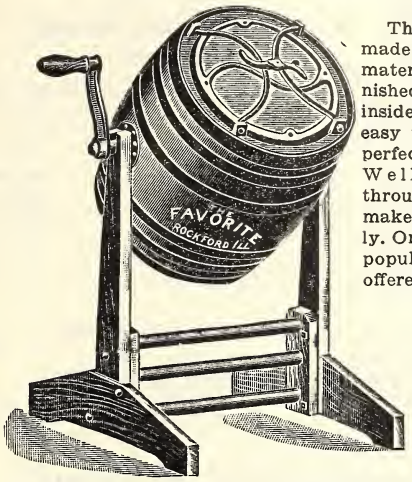
Self Retaining Tube 40c Postpaid



Plain Tube 30c Postpaid

KOW KARE—The great cow medicine. **Small size 65c., by parcel post 75c.; large size $1.25, by parcel post $1.40.**

THE FAVORITE CHURN



This Churn is made of good, hard material, well varnished smooth on inside, making it easy to clean and perfectly sanitary Well braced throughout. Will make butter quickly. One of the most popular Churns offered.

No.	Size, Gallons.	To Churn.	Price.
0	6	3	$ 6.00
1	10	5	7.00
2	15	7	8.00
3	20	10	9.00
4	25	13	11.00
5	35	18	13.00
6	60	30	21.00
7	75	37	24.50
8	90	45	28.00

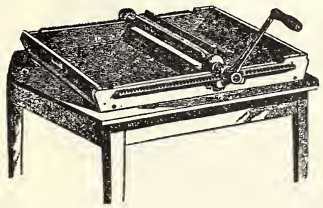
Pulleys for Large Sizes from $2.50 to $5.00.

IMPROVED CEDAR CYLINDER CHURN

Made of selected cedar free of knots.

No. 1—2½ gals....**$4.00**
No. 2—4 gals..... **4.50**
No. 3—7 gals..... **5.25**
No. 4—10½ gals... **6.00**

REID'S BUTTER WORKER



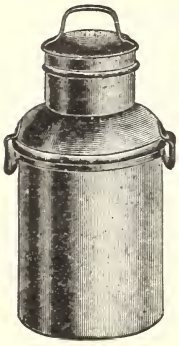
This machine acts on the butter on precisely the same principle as a ladle in the hands of a person, but with perfect uniformity and without injuring the grain. Made of the best material; iron parts galvanized, preventing rust.

No. 1—Capacity, 50 lbs. or less.....**$15.50**
No. 2—Capacity, 30 lbs. or less..... **13.50**
No. 3—Capacity, 20 lbs. or less..... **12.75**
No. 4—Capacity, 10 lbs. or less..... **11.50**

WELLS, RICHARDSON & CO.'S BUTTER COLOR

The best Butter Color on the market. Small bottle, colors 500 lbs., **35c**; large bottles. **65c** and **$1.00.**

BAG BALM—For all diseases of the cows udder or teats, there is no better remedy. **Price 60c, by parcel post 70c.**



MILK CANS

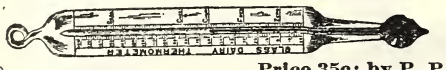
Baltimore Pattern Railroad Milk Cans

Our regular stock Can. Made of strong, very best material; straight neck, drop handle. Sizes:

20 qt **$4.25**
30 qt..... **$5.00**
40 qt..... **$5.25**

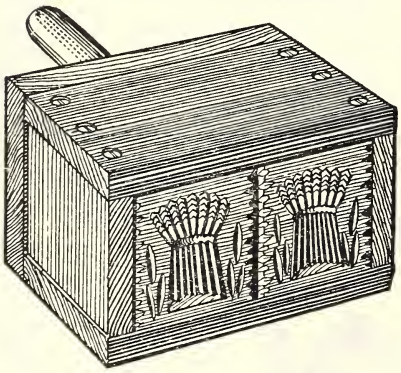
Name Plates put on **40c** each.
Permit Tags **15c** each.

FLOATING DAIRY THERMOMETERS



8 inch.....**Price 35c; by P. P. 45c**
8 inch Flange Thermometer, stands boiling water, **$1.25; by P. P. $1.35.**

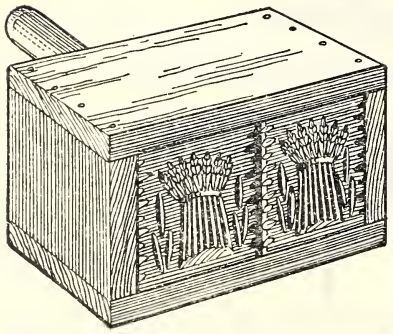
BALTIMORE PATTERN, HAND-MADE BUTTER MOLD



This Butter Print is handmade out of solid hardwood, and is put together with brass screws, making it indestructible. Being a two-piece print makes it very handy to use.

Price
½ lb. $1.25; by P.P. $1.35
1 lb. $1.50; by P.P. $1.70

BUTTER MOLD



Seeley Pattern

Furnished with Sheaf of Wheat. Movable block.

Price
½ lb. 65c; by P. P. 75c
1 lb. 85c; by P. P. 95c

PIERCEASY BULL RINGS

A Quality Product

Made to meet the demand of stockmen who require something superior to the ordinary ring. The sharp, smooth point cuts a clean hole Size No. RB-4, $\frac{1}{16}$x3½

Bronze
Price $2.00 each
By P. P. $2.07

COPPER RINGS, BLUNT

2½ inch.....**40c, by P. P. 45c**
3 " .....**50c, " " 55c**

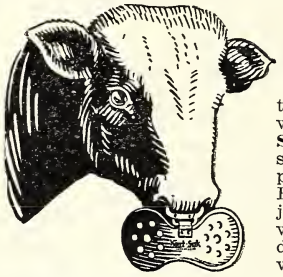
RICE'S CALF WEANER

Very effective for weaning calves and preventing cows sucking themselves.

No. 1, for calves, **35c, by P. P. 42c;** No. 2, for heifers, **50c, by P. P. 57c;** No. 3, for cows, **75c, by P. P. 82c.**

PARCHMENT BUTTER PAPER

We handle only the very best quality cut in the following sizes:
6x9 for ½ lb. prints. 9x12 for 1 lb. prints. 10x15 for 2 lb. prints.
Price per pound.....**$ .30; by P. P. $ .37**
Price per 5 pounds..... **1.40; by P. P. 1.52**

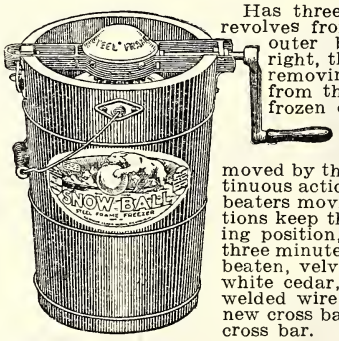


KANT-SUK CALF WEANER

Here is a dairy specialty that is in good demand the whole year 'round—**Kant-Suk Calf Weaners.** Light, strong and humane—cannot possibly injure cow or calf. Being made with a hinge joint, it swings out of the way when calf eats or drinks, but effectually prevents sucking.

Calf Size No. 1055.....**35c, by P. P. 42c**
Yearling Size No. 1055½.....**50c, " " 57c**
Cow Size No. 1056.....**75c, " " 82c**

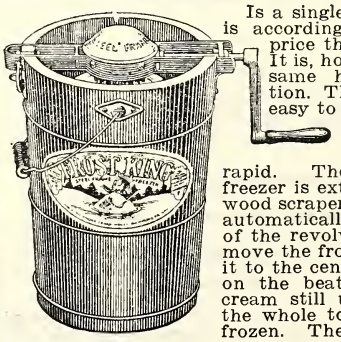
"SNOW BALL" FREEZER



Has three motions. The can revolves from right to left, the outer beater from left to right, the two wood scrapers removing the frozen cream from the sides with the unfrozen cream in the center, and throws all back to the side to be again frozen and removed by the scrapers. The continuous action of the can and two beaters moving in opposite directions keep the cream ever changing position, producing in about three minutes a very smooth, well beaten, velvety cream. Virginia white cedar, bound with electric welded wire hoops. Fitted with new cross bar lock and reinforced cross bar.

Sizes.....	2qt.	3-qt.	4-qt.	6-qt.	8-qt.
Retail Prices..	**$3.40**	**$4.05**	**$5.00**	**$6.30**	**$8.10**

THE "FROST KING" STEEL FRAME SINGLE MOTION FREEZER



Is a single-motion freezer, and is accordingly sold at a lower price than our other makes. It is, however, of exactly the same high-grade construction. The mechanism is very easy to operate, and the can being of the narrow model type makes the freezing very rapid. The operation of this freezer is extremely simple. The wood scrapers on the dasher press automatically against the sides of the revolving can. These remove the frozen crean and throw it to the centre where the spoons on the beater mix it with the cream still unfrozen and return the whole to the sides to be refrozen. The "Frost King" Steel Frame freezer will produce a rich and evenly frozen ice-cream in about three minutes.

Sizes.....	2-qt.	3-qt.	4-qt.	6-qt.	8-qt.
Retail Prices..	**$2.80**	**$3.35**	**$4.10**	**$5.20**	**$6.90**

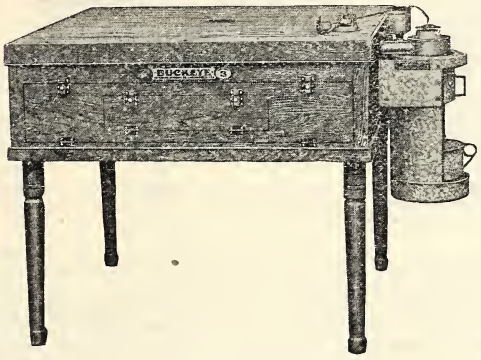
BUCKEYE "STANDARD" INCUBATORS

FOOLPROOF AND FIREPROOF

GUARANTEED To Hatch More Chicks and Stronger Chicks in the Hands of Any Beginner

So Simple They Can't Go Wrong—The Most Successful Hatching Device In The World

MADE IN FIVE SIZES—120 EGGS TO 600 EGGS



INCUBATORS

No. 14	—Style E, Capacity 65 Eggs	$ 16.50
No. 16	—Style E, Capacity 110 Eggs	22.50
No. 17	—Style E, Capacity 210 Eggs	30.00
No. 1	—Standard, Capacity 110 Eggs	30.00
No. 2	—Standard, Capacity 175 Eggs	35.00
No. 3	—Standard, Capacity 250 Eggs	46.50
No. 4	—Standard, Capacity 350 Eggs	55.00
No. 5	—Standard, Capacity 600 Eggs	87.50

The case is made of California redwood and beautifully finished like a piece of fine furniture. It has perfectly insulated double top, and the walls are so constructed that the necessary temperature can easily be maintained in any location, even if it be freezing, or up to 100 degrees.

A Standard Buckeye Metal Thermostat regulates the temperature to a fraction of a degree. With this device it is only necessary to regulate the temperature when the hatch is started—then you forget it, because the regulator stays where you put it and the **temperature of the egg chamber cannot change.**

The tank is an improved design that absolutely insures a uniform temperature throughout the egg chamber. This means that the temperature of each and every egg will be exactly right, and if there's a chick in the egg, you'll get it. The tank is equipped with an extra large boiler of new design, that insures the necessary heat, in any temperature, with an extremely small consumption of fuel. Both tank and boiler are made of a **heavy, patented, rust-resisting metal** that will last for years.

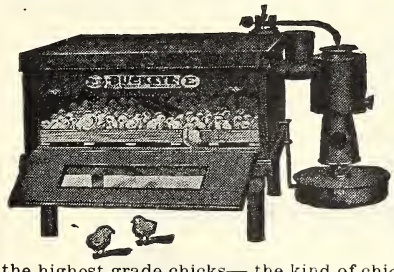
The complete lamp consists of a seamless, galvanized-steel bowl, a wide base "Miller" burner (the best burner made), and a one-piece galvanized-steel chimney. This lamp outfit is the best that money can buy—it's a lamp that won't smoke or get out of order. The lamp is self-adjusting, too! It sits on a portable support that always brings it to its correct position.

A Standard Buckeye Thermometer is included with each incubator, also a standard thermometer holder. With this equipment the correct temperature is always shown and the thermometer is always in its proper position. (Every Buckeye Standard Thermometer is guaranteed correct within one-fifth of one degree.)

The Improved Egg Tray is built to stay and will wear like iron.

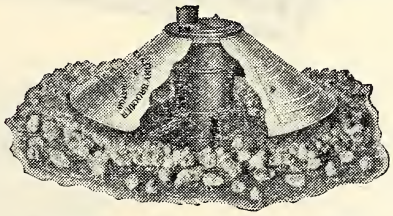
A Standard Buckeye Egg Tester goes with every incubator. This enables the operator to follow the development of the chicks while they are hatching, also to remove the unfertile and unhatchable eggs.

The successful poultry breeder is the man or woman who has learned BY EXPERIENCE, and when you find hundreds of such breeders using a certain article year after year, you must be convinced that they have found that article to be ABSOLUTELY SATISFACTORY or they would not be using it. And when the article in question happens to be an incubator—the machine on which they must depend for the production of all the chickens they raise—it is a foregone conclusion that they could not be successful unless the incubators they are using are producing the highest percentage of the highest grade chicks— the kind of chicks that enables them to perpetuate their stock and turn their product into profit.



THE STANDARD BROODER

Is Without Doubt the Most Successful Brooding Device Ever Invented



Standard Coal Burning Brooder

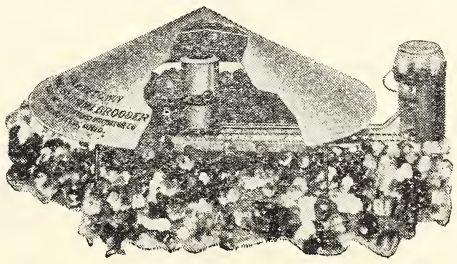
The Standard Brooder has actually revolutionized the whole poultry industry by helping the breeders to raise a much larger percentage of their young stock with just about one-fourth of the labor.

For the big breeder it has been a veritable God-send, and in a large number of cases has turned money-losing propositions into highly profitable plants, while for the smaller breeder it has been just as valuable through its ability to bring the young stock to quicker maturity and saving many valuable fowl that, under ordinary conditions, never would have survived.

Regardless of what they cost, there is no other brooder that compares with the Standard—that is the verdict of breeders who have tried them all.

Some brooders cost twice as much as the Standard because of their heavy complicated design, but their additional weight and complicated appliances only make them less desirable.

It is the very simplicity of the Standard that makes it the best brooder on earth. With only a few simple parts the Standard accomplishes with never-failing certainty those things in which the more complicated devices fail.



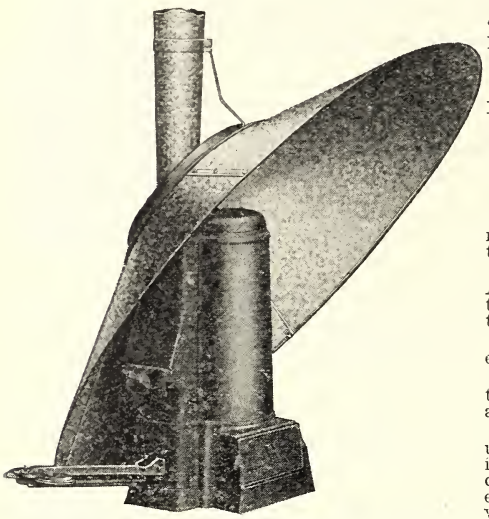
Blue Flame Brooder

BROODERS

No. 117	—Standard Brooder, Capacity 350 Chicks	$14.75
No. 118	—Standard Brooder, Capacity 500 Chicks	18.50
No. 119	—Standard Brooder, Capacity 1000 Chicks	22.50
No. 27A	—Blue Flame Brooder, Capacity 200 Chicks	16.75
No. 80	—Blue Flame Brooder, capacity 350 Chicks	17.50
No. 81	—BlueFlame Brooder, Capacity 500 Chicks	18.50

THE "MAKOMB GIANT" COAL BROODER (*patented*)

BEYOND COMPARE, THE GREATEST COAL BROODER EVER BUILT



How the canopy appears when tilted for attention to stove. An exclusive, labor saving feature.

No brooder can duplicate "MaKomb" performance because—"MaKomb" patents cover the basic-essential requirements of the Ideal Brooder.

Largest Actual Coal Capacities

42 in. 35 lbs. 52 in. 52 lbs. 62 in. 66 lbs.

By-Pass Control—Patented—Exclusive—Superior.
Patented Removable Baffle Plate—easy to clean.
Exclusive Tilting Canopy—entirely convenient.
Five inch stove pipe—none bigger.
One Piece Barrel—No joints—Gas proof.
Heavy Rocker Grates—large in area. Preferred.
Positively satisfactory Using Soft Coal.

The "MaKomb Giant" embodies perfectly the three requirements of the ideal brooder. These are—Coal Capacity—Control—Convenience.

Coal Capacity measures chick capacity and relief from frequent Attention. **Automatic Control** provides economy and proper temperatures, **Convenience** determines the like or dislike of the user.

These three basic requirements, Control, Capacity, Convenience, are incorporated in the "MaKomb Giant" as in none other.

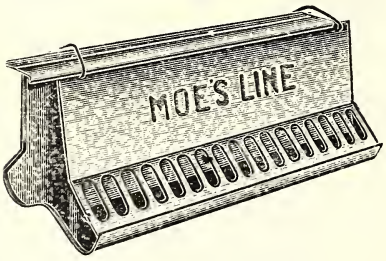
"MaKomb" Coal Capacity is actually 30% to 40% greater than others. This amazing fact can be readily verified and guarantees greater value, greater chick capacity and satisfaction.

"MaKomb" Control is our famous exclusive Bypass control, unlike any other, and proven far superior. The method of control is the heart of any brooder. Bypass control has both the strongest draft and the strongest check. There is no check known which even approaches the action of the Bypass. High winds blow without effect, because when the check is open the draft from the pipe pulls directly through the Bypass on the ash pit, and not on the fire, exerting a smothering action so the fire cannot run away. It takes Bypass control to handle Soft Coal perfectly.

Important Specifications

Diameter of Canopy	42 in.	52 in.	62 in.
Actual Coal Capacity	35 lbs.	52 lbs.	66 lbs.
Actual Chick Capacity	350	600	800
Shipping Weight, Stove Crated	111 lbs.	132 lbs.	154 lbs.
Shipping Weight, Stove Unerated	101 lbs.	118 lbs.	139 lbs.
Diameter of Grates	9¾	11	11
Price	**$14.00**	**$18.00**	**$22.00**

MOE'S BIG BOY FEEDER



A Feeder especially designed for growing stock—three to four week old chicks—and up to full grown mature fowl. Has a large capacity, with wide, good sized feeder openings, the edges of which are rounded over perfectly smooth, so that large head birds can not injure their combs.

Makes an excellent feeder for turkeys.

The feeder holes are exactly the right shape and size to prevent waste, and yet give easy access to a generous supply at all times.

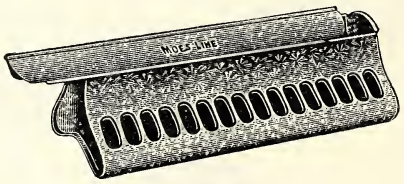
Has a large capacity, holding about 75 lbs., or 65 qts. of dry mash, with 17 openings on each side or a total of 34 openings.

Can be placed on the ground, or on a low stand, or suspended by the two wire handles.

Length 33 in., width 16½ in., height 14 in. One in a carton.

No. 160—Moe's Big Boy Feeder, with sliding cover. Shipping weight 16 lbs. Each, $3.75.

MOE'S ONE FORTY FEEDER



The finest feeder made to care for both large and small flocks. A wonderful feeder for young growing stock, and a great time and labor saver when chicks are raised in large numbers. Made of heavy galvanized steel with a large capacity.

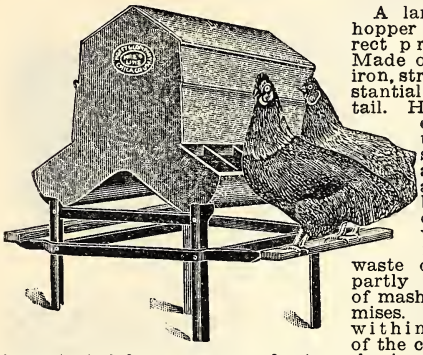
Sliding top cover, easy to fill and clean, and the birds cannot roost on the cover or sides to foul the feed.

No. 140—Feeder, capacity 10 quarts, length 21 in., width 8½ inc., height 7 in. 16 openings on each side, so that 32 chicks can feed at one time. Shipping weight 4 lbs. Each, **$1.10.**

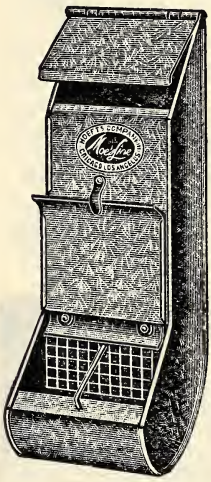
No. 141—The same style and construction as our No. 140, but much longer and with a larger capacity. Made of heavy galvanized steel, with sliding top cover, easy to fill and clean. Feeder ,capacity 17 quarts, length 35 in., width 8½ in., height 7 in. 27 openings on each side, so that 54 chicks can feed at one time. Packed one in a carton. Shipping weight 8 lbs. each.

Each, **$1.75.**

Moe's Mammoth Dry Mash Hopper



A large capacity hopper built on correct principles. Made of galvanized iron, strong and substantial in every detail. Has many excellent features; for instance it will accomodate a full 100 lb. bag of mash, doing away with the annoyance and waste of having a partly empty bag of mash on the premises. The feed is within easy reach of the chickens, and is protected from ravages of rats and mice. The tapor shape and interior construction provides a uniform automatic feed, and the wire grid and cross wires prevent any waste. The stand is of heavy angle iron, painted, and has wooden bars for the poultry to rest on when feeding. Length of hopper 35 in. Width 21 in. Height 18½ in. Capacity 100 lbs. Height of stand 15½ in. Total height, 34½ in. Price each, **$12.00.**

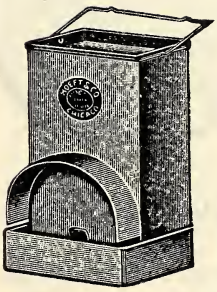


Moe's Dry Mash Hopper

A dry mash hopper of great merit, made of heavy galvanized iron. All parts accurately stamped with dies. The curved bottom keeps the feed within easy reach of the birds, and the taper shape of the hopper—Larger at the bottom—prevents the feed from clogging. The wire grid and the wires running from the flange through the wire grid prevents fowls from throwing out or wasting the feed. The sloping top prevents them from roosting on the hopper. When both covers are closed it is rat, mouse and weather proof.

Made in four sizes.

No.	Height	Width	Capacity	Price
35	19 in.	8½ in.	10 qts.	**$1.50**
36	19 in.	12 in.	14 qts.	**2.00**
13	19 in.	18 in.	22 qts.	**2.40**
37	19 in.	24 in.	32 qts.	**2.80**



Moe's Drop Bottom Wall Fountain

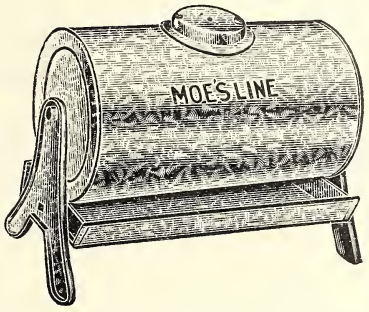
A practical, durable fountain, easy to fill and easy to clean. Made of best quality galvanized iron. May be hung on the wall out of the litter and dirt. Suitable for chicks, fowls or pigeons. Fitted with wire handle, so that two or more fountains, back to back, can be carried in one hand. Made in three sizes.

No. 40—Capacity 2 qts..... **.95**
No. 41—Capacity 1 gal.... **1.20**
No. 42—Capacity 2 gals.....**1.50**

French Poultry Killing Knife

Made of finely tempered instrument steel, with nickel handle; will last a life-time. Price **50c postpaid.**

Moe's Horizontal Swinging Fountain



A new type of fountain, with a large capacity, and can easily be kept clean and sanitary.

It is filled through the large cleaner opening at the top, which is large enough to admit the hand or a brush.

The tank swings on two pivots and when inverted the water will flow automatically to the drinking pan, as needed, and without spilling.

Has no valves, springs, or complicated parts. Mounted on stout galvanized steel legs and the heavy galvanized drinking pan is about 7 in. above the floor, a convenient height for poultry.

The round tank is directly above the pan, and acts as a shield or guard to prevent the birds from fouling the water in the pan. The tank is held rigidly in position. Holds ten gallons, easy to fill and clean, and will provide the flock with ample supply of clean, fresh water.

No. 43—Moe's Horizontal Swinging Fountain. Capacity 10 gallons. Size of drinking pan 12 in. by 22 in. Size of cleaner opening 5 in. Length of tank 21 in. Diameter 12 in. Packed one in a carton. Shipping weight 20 lbs. Price each, **$4.00.**

Moe's Sanitary Feeding Troughs

For Grown Fowls

Suitable for dry feed, wet mash, or water. The top slides off, so the pan can be easily cleaned and filled. Made of galvanized iron. The edges of the slotted openings are all turned over and smoothly finished. No sharp or rough edges to injure the fowls. Made in three sizes.

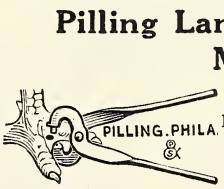
No.	Length	Width	Price
21	12 in.	5 in.	**40c**
22	18 in.	5½ in.	**60c**
23	24 in.	6 in.	**75c**

The Philadelphia Poultry Marker

Well made, with steel spring and cutter nickel-plated. Made in two sizes.

Price 25c Postpaid

Pilling Lansdowne Poultry Marker



Look at illustration and see how easy it is to use. Large or small size

25c Postpaid

Philadelphia Gape Worm Extractor

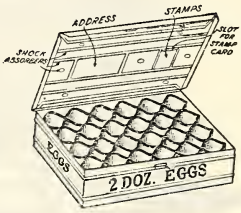
Price 25c Postpaid.

All Prices Subject to Change Without Notice

POULTRY SUPPLIES

METAL EGG CRATES

(NEW MODEL)

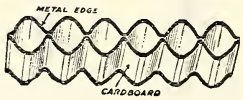


The aluminized metal egg crate has proven itself by its thousands of users to be the only practical way to ship eggs, butter and other farm products by parcel post.

The new Metal Edge Filler is recognized as a permanent fixture and thereby eliminates the necessity of replacement from time to time, making it both a money and time saver.

PRICES

1½ doz. size—all eggs	**$1.25**
2 " " " "	**1.50**
3 " " " "	**1.75**
4 " " " "	**2.00**
6 " " " "	**2.50**
9 " " " "	**3.25**
12 " " " "	**4 00**



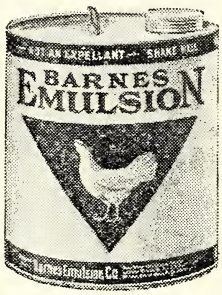
(Add postage to above prices.)

COMBINATION CRATES

With Metal Containers

No. 1— 2 lbs. and 1 doz. eggs	**$1.50**
No. 2— 4 " " 2 " "	**2.00**
No. 3— 4 " " 3 " "	**2.25**
No. 4— 6 " (3 2-lb. containers)	**2.25**
No. 5—12 " (3 4 " ")	**2.50**
No. 6—16 " (2 8 " ")	**2.50**
No. 7—24 " (2 12 " ")	**3.50**

(Add postage to above prices.)



BARNES EMULSION

Nowhere in the poultry industry is common-sense more essential than in considering the best way to stop the enormous losses caused by intestinal parasites (worms), and the many diseases due, directly or indirectly, to worm infestation.

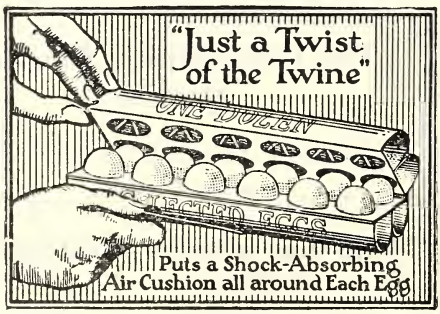
The best way to stop these enormous losses is to keep poultry free from the cause—WORMS. And the best way to keep poultry free from worms is to prevent their occurrence. By using Barnes Emulsion.

1 qt. **$1.00** 1 gal. **$3.00**

Celluloid Leg Bands

Made of celluloid, in fast colors. Sizes for large and small poultry. baby chick and pigeon.

12....**15c** 50....**50c** 100....**75c**

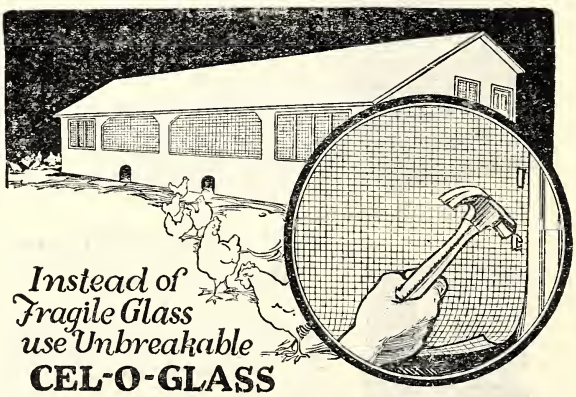


Eliminate breakage and save your profit. You can do this if you will pack your eggs in the Continental Safety Egg Carton. Place your eggs, give a "Twist of the Twine," and the trick is done. Used extensively by poultrymen all over the country.

Price:

Dozen	Hundred	Per case of 250	Per thousand
25c	**$1.60**	**$3.75**	**$14.25**

Mailing weight about 2 lbs. to dozen.

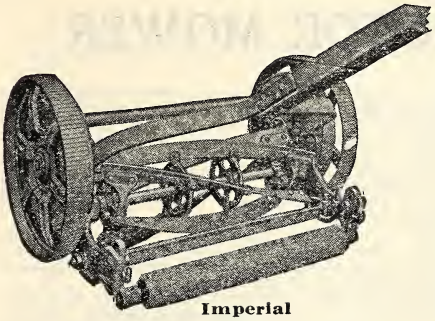


THE NEW UNBREAKABLE GLASS

It is the most economical and practical glazing material on the market. It replaces ordinary, fragile, costly glass for nearly every purpose. It is made of coarse mesh galvanized wire cloth, treated in such a manner that the spaces between the strands are filled with a clear, translucent, tough flexible substance that will not rub off, peel or become brittle. It is not affected by weather conditions. **36 inches wide, 45c. per running foot. Rolls of 100 feet, $42.50.**

All Prices Subject to Change Without Notice

THE COLDWELL LAWN MOWERS



Imperial

IMPERIAL HIGH WHEEL ROLLER BEARING

The New Imperial Roller Bearing Mower is equipped with Timken tapered roller bearings. Has ten and a half inch drive wheels and the gear ratio has been increased so as to give it higher frequency. Easily adjusted. Five blades. Roller bearings enclosed in dust-proof housings. The best mower on the market for hard service.
15-inch.....**$20.00** 18-inch.....**$22.00** 21-inch.....**$24.00**

INTERSTATE

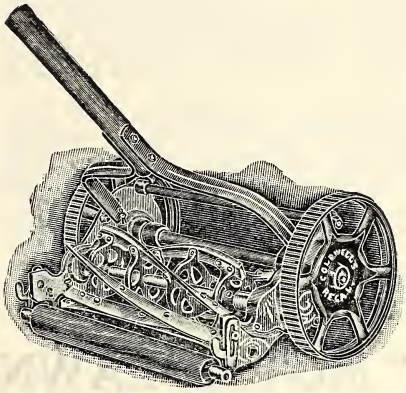
This is a good Mower, at a medium price, for all ordinary work. It is made on thoroughly practical lines and is so constructed that it cannot be easily disarranged. The drive wheels are 9 inches in diameter, with the gears raised up from the ground fully protected from the dirt and cut grass. The revolving cutter is 6 inches in diameter and has 4 crucible steel blades highly tempered and ground true their entire length. It is carried on our pattented adjustable ball bearings.
14-inch.....**$12.00** 16-inch.....**$13.00** 18-inch.....**$14.00**

THE JEWEL

The Jewel is a first class, low wheel, machine equipped with adjustable bronze bearings. A very light weight, easy running mower.
12-inch.....**$7.50** 14-inch.....**$8.00** 16-inch.....**$8.50**

THE BANNER

The best low priced lawn mower on the market. Material, workmanship and finish equal to many high priced machines. A light, durable mower guaranteed to give excellent satisfaction and priced to meet the demand for a cheap lawn mower for small gardens.
12-inch.....**$6.75** 14-inch.....**$7.50** 16-inch.....**$8.25**



COLDWELL'S "REGAL" LAWN MOWER

Coldwell's "Regal" is the best ball bearing lawn mower on the market, the principal feature being that the ball-bearings are in the drive wheels instead of in the revolving cutter journals, these latter being supplied with adjustable bronze bushings. By having ball-bearings in the drive wheels, the weight of the lawn mower is carried thereon, and when the bearings are adjusted, the drive wheels are brought back to their original centers; this prevents crowding of the gears and never allows the drive wheels to get loose.

These lawn mowers are equipped with five blades, our patent reversible channel-shaped bottom knife, triple-pawl indestructible ratchets in both wheels and the simplest adjustment of knives ever made. The gears are fine cut, insuring quietness of running, while the large diameter drive wheels insure lightness of draft. The handle adjustment is such that it can be readily adapted for mowing terraces; they can also be supplied with grass catchers when desired. It is fully guaranteed to give entire satisfaction and to have double the life of any other lawn mower on the market, as all its bearings are cheaply renewable, being fastened to and not a part of the side frames.

PRICES REGAL MOWERS

16-inch.....**$23.00** 18-iuch.....**$25.00**

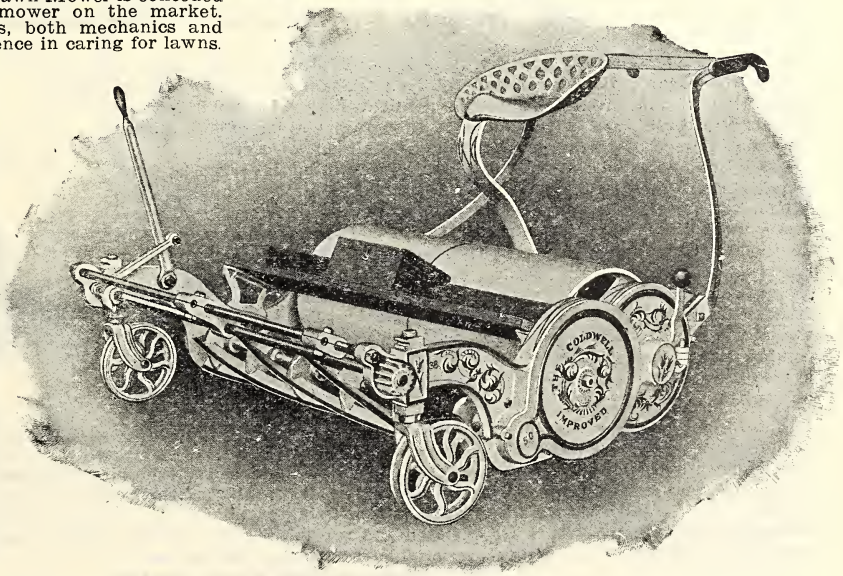
COLDWELL'S IMPROVED HORSE LAWN MOWER

Coldwell's Improved Horse Lawn Mower is conceded to be superior to any other mower on the market. This is the opinion of experts, both mechanics and men who have had long experience in caring for lawns. Some of its points of merit are: Light draft, large driving rollers, non-clogging castor wheels; can be thrown out of gear without driver leaving seat; both sides of machine can be adjusted at once; device for instantly raising all knives from the ground when passing over stones or other obstructions, or when drawing over a roadway; side-draft attachment to prevent horse from walking on grass before it is cut.

Coldwell Mowers wear well The material is the best. Coldwell Mowers were adopted several years ago by the Baltimore City parks and have been used since then in preference to other makes. They are also used by the leading country clubs and on the principle lawns around Baltimore. Guaranteed to be the best.

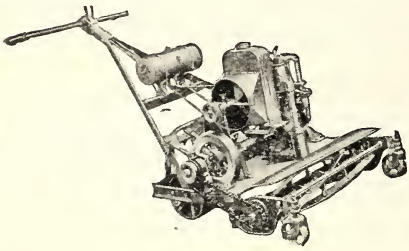
35-inch, complete with seat and shafts.....**$160.00**

30-inch, complete with seat and shafts.....**$140.00**



Horse and Hand Lawn Mowers Sharpened and Repaired in a Thorough and Satisfactory Manner

THE COLDWELL CUB MOTOR MOWER



The Coldwell Cub is a light, substantially built power lawn mower with a 21-inch detachable front cutting unit and a full width drive roller Separate clutches control the cutting unit and the traction roller. The clutch levers are conveniently located on the handle and can be engaged or disengaged with one finger. The drive roller is divided and is driven through a differential so that sharp turns can be made without marking the lawn. Where ground conditions require, wheels can be substituted for the drive roller, making a wheel type mower but retaining the advantages of a removable front cutting unit.

The front cutting unit makes it possible to cut close to trees or walls so that a finished job can be done without the use of a hand mower. The cutting unit can be removed for sharpening or repair without loosening up the cross members of the frame or cutting unit.

The engine and transmission are mounted on a steel frame in a perfectly accessible position and located so the mower is in lateral balance. The engine has been specially designed for this mower. Not being limited to the general purpose engines offered on the market, it has been possible to incorporate the features required for this exacting heavy duty service. The engine is 2 ½-inch bore, 3-inch stroke and at 1200 revolutions per minute develops 1 ½ brake horse power.

The cylinder is water cooled with fan and radiator so that full load can be carried continuously in hottest weather. Note particularly that this is a horizontal engine which give a low center of gravity and aids in obtaining a perfect balance. An automobile type carburetor is used with a gasoline tank large enough for eight hours use. A constant speed is maintained by a fly ball governor mounted in the fly wheel. The governor parts are sturdy and covered so that they will not be deranged or damaged in handling.

One and one half pints of oil poured into the crank case supply lubrication for all the engine parts for several days. Oil is raised from the oil pan by a pump and circulated to the bearings and cylinder. Splash lubrication is NOT used as it is unreliable in an engine subjected to such violent vibration and tipping, as is encountered in cutting rough lawns. Ignition is supplied by a Bosch high-tension fly wheel type magneto mounted directly on the crank shaft. These magnetos have been developed for outboard motors and are specially water-proofed. The crank shaft is mounted on two large Timken tapered roller bearings. This is a feature never before incorporated in an engine of this size, but it is warranted in view of the exacting service required. These bearings are guaranteed for the life of the engine and will be replaced if they fail for any reason.

The friction clutches are of the dry place spring loaded type almost universally used on automobiles. Each clutch is separately controlled from the handle and when engaged a spring forces the disc up to the drive plate. No adjustment is needed as the spring follows up any wear on the moulded asbestos clutch lining. The power is transmitted through hardened roller chain. Particular attention has been given to making the cutting unit rigid and accessible. Note that there are THREE heavy tie rods and a rigid knife bar to hold it in alignment. The knife bar adjustment is on the outside and the wiper bearings have a simple adjustment on the outside of the frame. A Zerk grease gun furnishes efficient lubrication for all the bearings outside of the engine.

In this machine we realize our ideal of a light, strong, easily handled mower, so simple that an inexperienced man can understand and operate it. It is made light and strong by using steel and malleable iron where best adapted. Flexibility in maneuvering is obtained by proper distribution of weight and mounting on a large drive roller and casters.

Price $195.00 F.O.B. Factory

THE COLDWELL MODEL "L" MOTOR LAWN MOWER AND ROLLER

FLEXIBLE - VERSATILE - DEPENDABLE

A most important development in Coldwell Motor Mower construction is the feature of mowing and rolling simultaneously, which is incorporated in the Model "L." The gentle rolling with each cutting imbeds the earth around the roots of the grass and assures a sturdy growth. This is maximum efficiency at a minimum of cost.

The "two operations in one" are done with half the labor, in half the time, at half the outlay. Without the Gang Unit attachments, the Model "L" mows and rolls four to six acres per day on a gallon of gasoline. With the Gang Units attached, increasing the cutting width, from 25 to 60 inches, the capacity of the Model "L"is more than doubled. Simple and economical to operate, with an abundance of reserve power for extreme grades and ever dependable, the Coldwell Model "L" Motor Lawn Mower and Roller is a machine which meets, in every respect, the most exacting lawn requirements. Particularly suitable for small estates, parks, cemeteries, school and club grounds. The Model "L" is also useful for separate rolling of tennis courts and close fine cutting on putting greens.

The Model "L" is a combination motor lawn mower and roller designed for simple, economical and dependable performance. It is powered with a Fuller & Johnson, 3 ½ h. p., 4-cycle, water cooled motor with radiator and fan. The cutter knives and full traction roller are each independently driven direct from the motor and each has its separate clutch and control lever. The full floating cutter front conforms readily to the uneven surface of the ground. Motor and all working parts are protected from flying grass and dirt. Forced feed lubrication with "Allyn-Zerk" automatic grease gun. Gears are enclosed and run in oil. Finest roller chain with provision to take up wear. A fully guaranteed and thoroughly dependable motor lawn mower and roller.

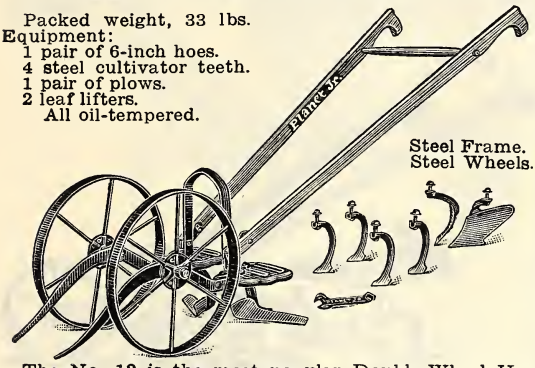
Price $350.00 F.O.B. Factory

PLANET JR. HAND MACHINES Single-Wheel Hoes

SEE PRICE LIST BELOW

No. 12 PLANET JR. DOUBLE AND SINGLE-WHEEL HOE COMBINED

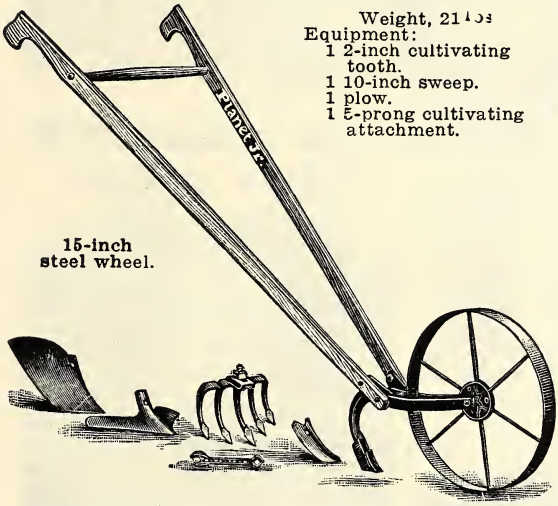
Packed weight, 33 lbs.
Equipment:
1 pair of 6-inch hoes.
4 steel cultivator teeth.
1 pair of plows.
2 leaf lifters.
All oil-tempered.



The No. 12 is the most popular Double-Wheel Hoe we make. It can be used by man, woman or boy. It is identical with No. 11, except that the 4½-inch hoes and the rakes are omitted from the equipment, and it is sold at a correspondingly less price. The attachments with it are what gardeners use most, and the short hoes, rakes and any of the attachments can be added at any time. You'll be astonished how easy it is to save time, labor, money and get bigger crops if you use it.

No. 19 PLANET JR. GARDEN PLOW AND CULTIVATOR

Weight, 21 lbs.
Equipment:
1 2-inch cultivating tooth.
1 10-inch sweep.
1 plow.
1 5-prong cultivating attachment.



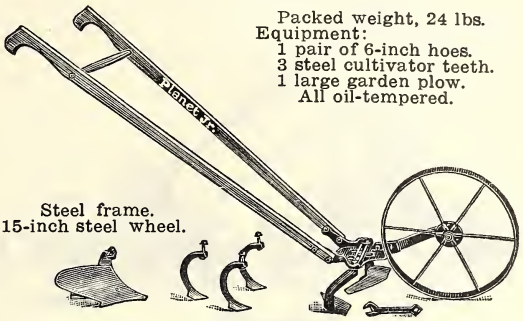
No. 19—This attractive implement is especially designed for the farmer's garden work, though it offers to every one with either field or garden a cheap and effective tool for wheel-hoe operations. The standard is slotted for depth regulation, and an adjustable piece carries any of the attachments that go with the machine. The cultivating tooth does deep work and marks out rows for onion sets, plants, etc. The sweep is fine for level shallow work. The five-prong cultivator attachment is bolted directly to the frame, first removing the S-37 standard. The plow marks out furrows, covers them and plows to or from the crop as wanted; opens furrows for fertilizer, peas, beans, etc. Use the five-prong attachment for deep and shallow cultivation. It will break up the ground and leave a mulch so necessary to preserve the moisture in the soil. The variety, shape and quality of the tools make the implement light-running and effective. It is strong, well made and quickly adjusted. The height of the handles can be changed to suit man or woman, boy or girl.

WHEEL HOES, GARDEN PLOWS, ETC.

No. 11.... **$13.75**	No. 16....$ **9.00**	No. 19.... **$6.00**
No. 12.... **10.75**	No. 17.... **7.75**	
No. 13.... **8.00**	No. 17½.. **6.75**	
	No. 18.... **5.75**	

No. 17 PLANET JR. SINGLE-WHEEL HOE

Packed weight, 24 lbs.
Equipment:
1 pair of 6-inch hoes.
3 steel cultivator teeth.
1 large garden plow.
All oil-tempered.



No. 17 is identical with No. 16, except in equipment, and all that has been said previously regarding Planet Jr. Wheel Hoes is equally true of No. 17. The three sets of attachments which go with it are all the finest of their kind, and make an outfit sufficient for most garden work. You can do more and better work with it in one day than you can do in several days with the old-fashioned hand hoe. The hoes exchange sides to work to or from the row, and change of wheel regulated the depth. The hoes are constantly useful throughout the season. The cultivating teeth are oil-tempered and work admirably, are changeable for pitch and are useful for marking out rows.

No. 119 PLANET JR. GARDEN PLOW AND CULTIVATOR

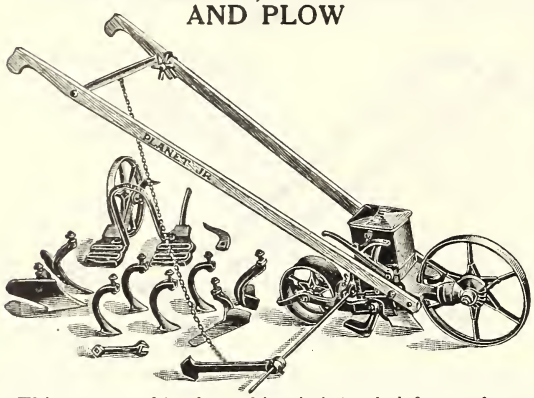
This new member of the "Planet Jr." family will appeal to all those who prefer a high-wheel tool for their garden work. Where the soil has not been so thoroughly and carefully prepared, the high wheel undoubtedly makes an easy-running tool. The wheel is 24 inches in diameter, with a rim 1½ inches wide, insuring easy running in the lightest soil. The equipment is so complete that it will meet all the needs of the ordinary garden where the adjustments and refinements of the higher-priced wheel hoes are not required. The plow is the same as has been used for a number of years on our No. 19 Garden Plow and has proven most satisfactory. It may be used for plowing the ground in the Spring, going twice in each furrow. Later it will open furrows for fertilizer or for planting, covers them and plows to or from the crop during the season. The wide cultivator tooth may also be used for opening furrows or for cultivating and hilling between the rows of plants. Price, **$3.75.**

FIRE-FLY GARDEN PLOW

This tool is exceedingly useful to owners of small gardens. It will throw a furrow 4 to 6 inches deep, and deeper by going a second time in each furrow. It makes fine furrows for manure or seeds and covers them, and makes up rows for all kinds of plant setting. In cultivating, plow away, weed the row and plow back again; nothing more thorough than this. After the furrow is thrown away from the crop lightly, leave it a few days before throwing back. This tool will enable a busy man to do in his spare minutes nearly all the work in a family garden. Chicken raisers find it of great advantage in plowing up their scratching yards. Packed weight, 14 lbs. Price, **$4.25.**

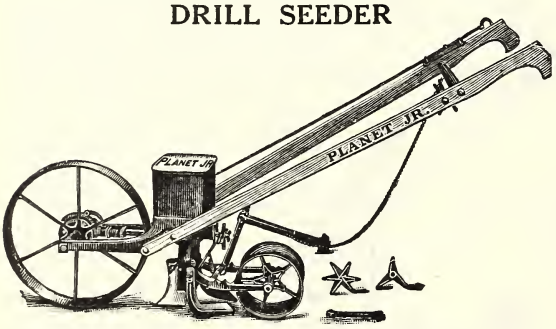
Cultivate The "Wisdom" Tomato With the Above Tools, (See Page 23)

No. 25 PLANET JR. COMBINED HILL AND DRILL SEEDER, DOUBLE-WHEEL HOE, CULTIVATOR AND PLOW



This new combined machine is intended for gardeners who have sufficient acreage in crops for a double-wheel hoe to be used to good advantage and do not want to buy separate machines. It can be used as a drill and is almost identical with the "Planet Jr." No. 4. It is thoroughly substantial and accurate in sowing all kinds of garden seeds in hills or drills. It has 11¼-inch wheels, and the hopper holds 2½ quarts. As a wheel hoe it is identical with the "Planet Jr." No. 12 Double-Wheel Hoe, the very best machine on the market. It takes but a moment to change from drill to wheel hoe, and the whole combination is one that we can heartily recommend and guarantee to be satisfactory. Price, **$21.50.**

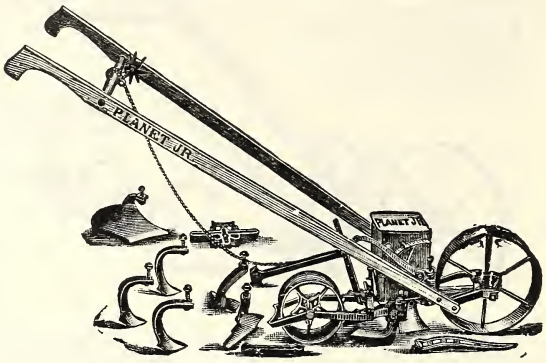
PLANET JR. No. 3 HILL AND DRILL SEEDER



This Seeder is the latest and most perfect development of the hand seed drill. It sows evenly in drills and also drops in hills 4, 6, 8, 12 or 24 inches apart. It is thrown out of gear instantly by moving a convenient lever or the flow of seed is stopped by pushing down the feed rod. No time is lost, no seed is wasted; it is quickly set to sow the different kinds of seeds in the exact quantity required. We guarantee this drill to be accurate and to give satisfaction. The accuracy insures a regular stand of plants with the least seed, and the price of the drill is more than made up in the saving of seed. Holds 3 quarts. Price, **$17.50.**

No. 5 PLANET JR. HILL AND DRILL SEEDER

This drill is identical in construction with the No. 3, but is larger. The hopper holds 5 quarts. It works very light and is intended for those having a great deal of planting to do. Price, **$20.00.**



PLANET JR. No. 4 COMBINED SEED DRILL, SINGLE-WHEEL HOE, CULTIVATOR AND PLOW

This is the most popular combined tool made. It combines in a single implement a first-class hill-dropping seeder, a single-wheel hoe or weeder, a cultivator and a plow. The hopper holds 2 quarts of seed, which can be sown in continuous rows or dropped in hills at 4, 6, 8, 12 or 24 inches apart. Capacity of hopper, 2½ quarts. The drill is detached and the tool frame substituted by removing but one bolt. With this one implement the small farmer can do practically all the work in small crops. Price, complete, **$18.00.**

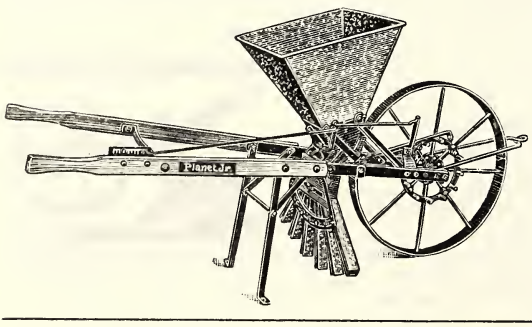
The following are some of the seeds that may be planted with PLANET JR. SEEDERS:

Apple	Okra	Peas
Asparagus	Onions for Bulbs	Pepper
Beans	Onions for Sets	Pickle
Beets	Parsley	Radish
Cabbage	Parsnip	Rape
Cantaloupe	Pear	Rice
Carrot	Ginseng	Ruta-Baga
Cauliflower	Kale	Sage
Celery	Leek	Salsify
Chicory	Lettuce	Savoy
Cucumber	Mangold	Spinach
Endive	Marjoram	Sugar Beet
Field Peas	Melon	Tobacco
Flower Seeds		Tomato
		Turnip

PRICES OF SEEDERS

No. 3	**17.50**
No. 4	**18.00**
No. 4-D (plain)	**14.25**
No. 5	**20.00**
No. 25	**21.50**

No 220 PLANET JR. FERTILIZER DISTRIBUTOR

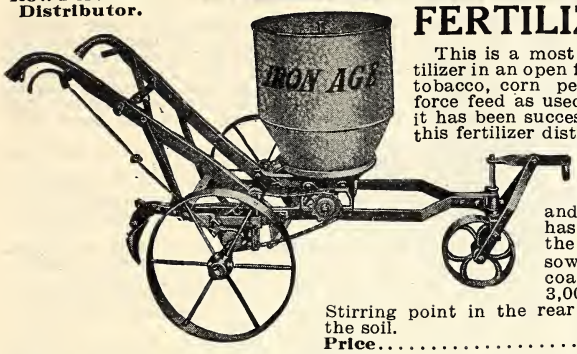


The No. 220 will distribute fertilizer in the middles of three rows 12 to 14 inches apart; it will side-dress one side each of two rows up to 36 inches apart. You can use it in very narrow rows—as close as 9 inches. You can use it in 42 to 48-inch rows by closing off the flow in three spouts and distributing through the other three—either on the right or left hand side. It spreads fertilizer from 4 to 30 inches on the ground. The hopper capacity is one bushel and the weight of the load is placed over the wheel, making it easy to push. Will distribute 100 to 2000 lbs. of commercial fertilizer to the acre.

Price $27.00

See Page 23 For "Wisdom" Tomato

No. 170 Single-Row Fertilizer Distributor.

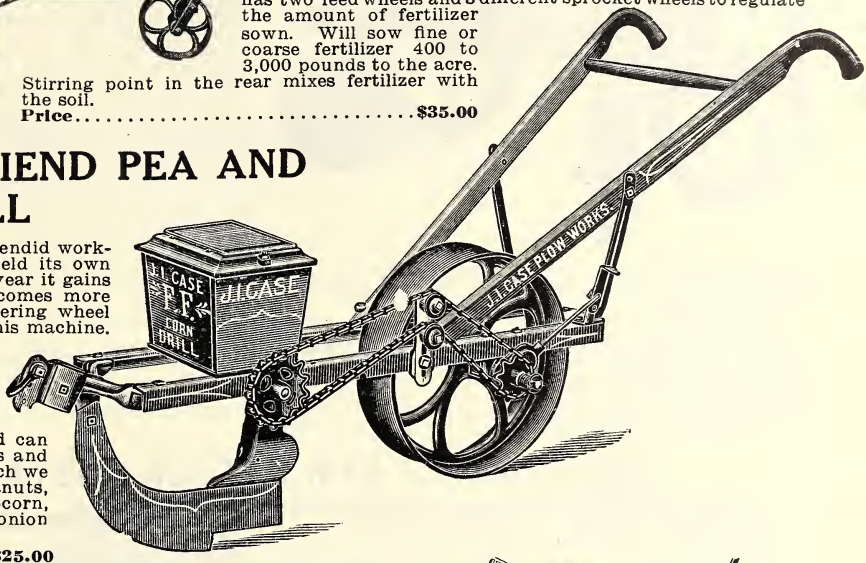


"IRON AGE" AND SPANGLER SINGLE-ROW FERTILIZER DISTRIBUTORS

This is a most convenient and satisfactory machine to distribute fertilizer in an open furrow after the ground is prepared for planting potatoes tobacco, corn peas, beans, etc. This machine has practically the same force feed as used on the well-known "Iron Age" Potato Planter where it has been successfully used for a great many years. The mechanism of this fertilizer distributor is exceedingly simple, yet positive, in its action. The revolving disc and feed wheels are so arranged that they keep the fertilizer in a loose, evenly and easily handle condition. The galvanized hopper holds a full sack, 167 pounds. A gate regulates the amount of fertilizer sown, and saves waste when turning at end of rows. This machine has two feed wheels and 3 different sprocket wheels to regulate the amount of fertilizer sown. Will sow fine or coarse fertilizer 400 to 3,000 pounds to the acre. Stirring point in the rear mixes fertilizer with the soil.

Price.....**$35.00**

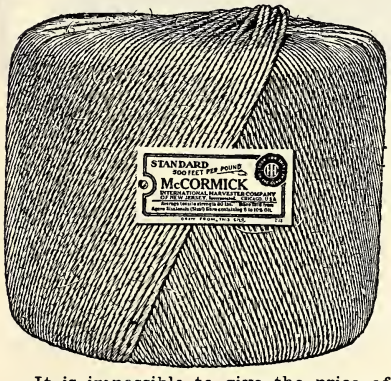
FARMER'S FRIEND PEA AND BEAN DRILL



This simple, compact and splendid working tool has for many years held its own against all competitors. Each year it gains a host of new friends and becomes more popular. The runner and covering wheel are distinguishing features of this machine. These make it practically ½ of a 2-horse planter, the runner cutting a furrow, the wheel closing it and packing the earth over 8, 12, 16 and 20 inches apart. Plates for ensilage and for any kind of seed can be obtained. Plants corn, peas and beans. With special plates, which we can furnish, it will plant peanuts, rice, broom corn, sorghum, popcorn, carrot, beet, turnip, millet, onion seed, etc.

Price With Lead Wheel..... ..**$25.00**

BINDER TWINE

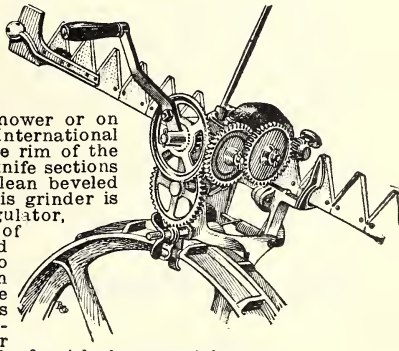


It is impossible to give the price of Binder Twine in advance, as the price is subject to market changes. Write for prices.

CRYSTAL METAL FARM BELLS

These Bells are covered with a rich gold bronze, black varnished hangings. No. 1, 40 lbs., **$4.50**; No. 2, 50 lbs., **$6.00**; No. 3, 75 lbs., **$8.00**; No. 4, 100 lbs., **$11.00.**

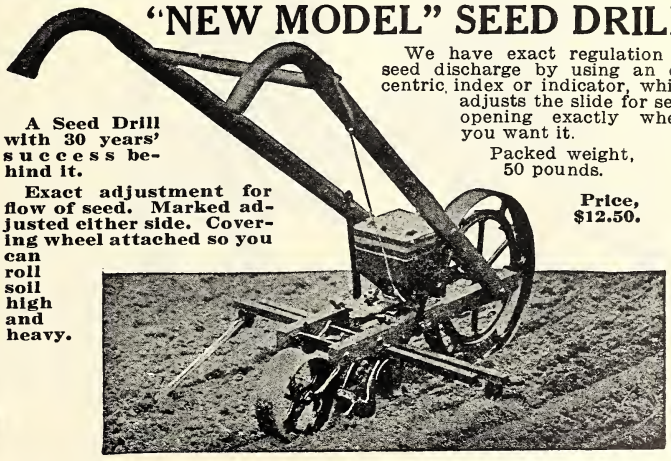
MOWER KNIFE GRINDER



There is nothing harder on the mower or on the team than dull knives. The International Knife Grinder can be clamped to the rim of the wheel, where it is easy to use. The knife sections can all be ground with a perfectly clean beveled edge, all of them exactly alike. This grinder is equipped with a fine-tempered steel regulator, which adjusts the pressure so that all of the sections can be ground evenly and regularly. The handle runs parallel to the knife, which is always in plain sight while being ground. Thus there is no danger of cutting the operator's hands. The grinder can also be fastened to a bench. A special stone for grinding tools or gumming saws will be furnished on special order.

Price.....**$6.00**

"NEW MODEL" SEED DRILL



A Seed Drill with 30 years' success behind it.

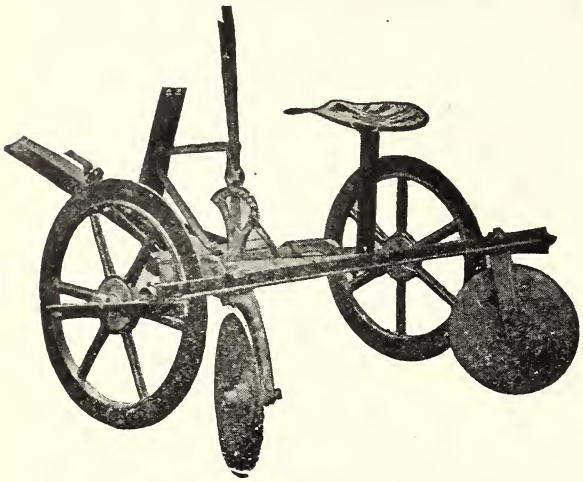
Exact adjustment for flow of seed. Marked adjusted either side. Covering wheel attached so you can roll soil high and heavy.

We have exact regulation of seed discharge by using an eccentric, index or indicator, which adjusts the slide for seed opening exactly where you want it.

Packed weight, 50 pounds.

Price, $12.50.

GENUINE No. 2 HAINES MARKERS



The Genuine No. 2 Haines Marker has been greatly improved for this season. Among the changes made is the disc hanger being in two parts. When the bearing becomes worn it may be replaced at small cost. The top of hanger has teeth cast all around the top, so that any angle may be had. The frame of the marker has improvements and has been strengthened. The lever and quadrant have been re-designed.

The marker is made in two sizes, for two rows and four rows. All sizes have self-oiling disc bearings.

All these improvements have been added to make the marker thoroughly up-to-date. Look the Guenine No. 2 Haines Marker over before you buy and you will make no mistake.

The marker can be regulated to open rows at any depth required by the use of the lever in front of the operator, and may be adjusted while the machine is in motion.

The marker is of light draft and easily controlled by a light boy, as it is not necessary for operator to dismount at ends of furrows to lift one pound.

The marker is a perfect covering or listing machine, covering one or more rows as may be required, and is under perfect control of operator by use of lever that may be adjusted while the machine is in motion.

The marker is very quickly changed from marking to covering; it is only necessary to loosen two nuts and move disc along to the required place and adjust. The machine is graduated with the different distances that may be plainly seen by the operator.

The marker is strongly built and equipped with marking-pole, double trees and neck-yoke, and the machine is under the control of the operator, who, by lowering or raising lever can adjust depth of furrows and raise disc from ground at ends of row while turning without dismounting. Price, **$45.00.**

We also have the exclusive agency for the IMPROVED GILTZ MARKER.

The **GILTZ** is a well-known marker throughout Anne Arundel County, having been in use many years. This marker has been greatly improved by Mr. Giltz, the patentee, with the following features: First he has solved the problem of an absolutely dust-proof wheel hub boxing. The wheels are higher than any other marker made and are adjustable from two to six feet for covering and opening the furrows, and is elevated to a sufficient height to prevent main frame from dragging. The angle irons are made of heavy Carnegie steel, and will positively not bend. Be sure to see this marker before purchasing. Price, **$75.00.**

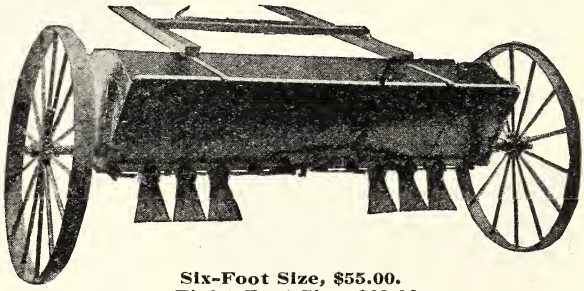
THE HAINES FERTILIZER DISTRIBUTOR

Will Handle All Grades of Commercial Fertilizer, Lime and Ashes, In Rows of All Widths

The Haines Universal Distributors are made in several sizes to meet the various requirements of the planters and farmers.

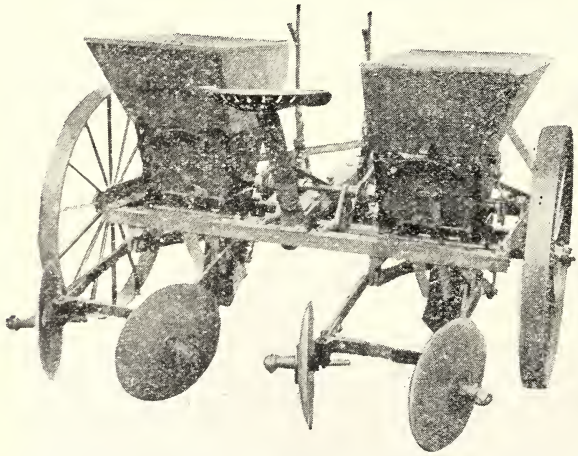
It can be used as a broad caster for lime or fertilizer. It is easy to load and brings the distributor near the ground, only 11 inches for materials to fall, and for that reason the light materials are less liable to be carried away by the wind. Any quantity per acre may be sown by these machines by simply moving one lever to the adjustment required.

No gears of any kind, no chains, no sprocket wheels, no belts and no springs—fewer parts than any other machine. A positive force feed, strong enough to handle the materials being used without caking in the hoppers, and at the same time giving regular discharge of materials.



Six-Foot Size, $55.00.
Eight-Foot Size, $60.00.

No. 10 HAINES TWO-ROW FERTILIZER DISTRIBUTOR



The No. 10 Haines Two-Row Fertilizer Distributor has been brought to the latest ideas for opening two rows at one time and at the same time distribute fertilizer in two rows at one operation.

The No. 10 Distributor has two opening plows for opening the rows six inches wide and six inches deep if required, these changes are under the control of operator with two levers directly in front of driver for controlling each row separately.

The No. 10 Distributor will open two rows 30, 33, 36 and 42 inches apart with very little changing of bolts.

The No. 10 Distributor has the well known Haines fertilizer attachment so arranged to sow two rows of fertilizer twelve inches wide or it may be sown six inches wide in rows.

The No. 10 Distributor will sow small quantity in each row and can be regulated to sow large quantities per acre.

The No. 10 Distributor delivers the fertilizer close to the furrow through rubber tubes and it will not be blown out of row by wind.

The No. 10 Distributor is strongly built for rough usage, with no chains or springs, only two gears and independent clutches for each row, making the driving parts of very simple form.

The No. 10 Distributor is furnished with covering discs where needed for making up ridges for plants and has mixing teeth for mixing fertilizer with soil when the row is to be left open for planting.

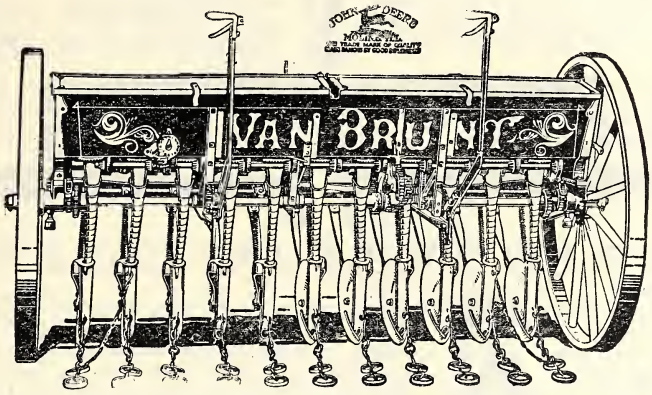
There are two separate hoppers for fertilizers holding two hundred pounds each, the machine has all steel angle frame and thirty-six inch steel wheels with very few cast parts.

Price:

Plain.....**$115.00** Complete.....**$130.00**

VAN BRUNT FERTILIZER GRAIN DRILL

Furnished With Wood or Steel Wheels



Sizes—7-inch feeds; 9, 10, 11, 12, 13, 16 discs, shoes or hoes; 8-inch feeds; 6, 8 discs, shoes or hoes

Seed is Covered Properly—Rapid Growth is the Result

Every kernel or seed is conveyed by metal tubes from the feed to the bottom of the furrow before any soil can drop back. The seed beats the dirt. The Van Brunt Disc Drill boots make this possible. They are brought forward so that they lie entirely within the surface of the disc. The seed passing through does not come in contact with the up-turning disc surface.

. Grass Seed Attachment

All Van Brunt High Wheel Grain Drills can be supplied with grass seeders, which can be used either for drilling or broadcasting clover, timothy, alfalfa, and other similar seeds. It is attached to the front of the grain box and can be used at the same time seed is being planted and fertilizer distributed.

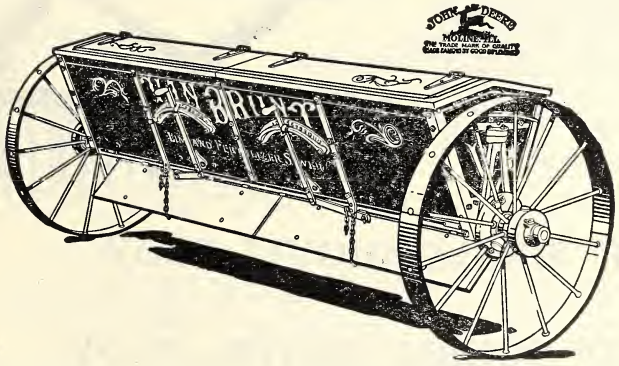
Prices:

8-8 Single Disc Drill Complete.....**$145.00** 9-7 Single Disc Drill Complete.....**$160.00**

SEND FOR SPECIAL DRILL CATALOGUES

VAN BRUNT LIME AND FERTILIZER SOWER

WITH OSCILLATING AGITATORS



The Van Brunt Lime and Fertilizer Sower is built in the standard size to cover eight feet of ground, with a carrying capacity of ten bushels. For strength, durability and simplicity it is unexcelled.

This sower has 36-inch steel wheels with staggered spokes, heavy, wide rims, removable dust-proof boxings, and compression grease cups with chilled wheel bearings.

The hopper is exceptionally strong, of selected well-seasoned matched lumber; steel ends with angle steel corners, thoroughly braced; close-fitting covers and removable screens.

Shifter levers on rear of hopper are provided with feed gauge lock, so that when set to sow a certain amount, the feeds may be closed entirely or quantity reduced when desired, and thrown back to the original position, avoiding the necessity of resetting the feed gauge.

Each ground wheel is a drive wheel, driving one-half of the machine. There are **no gears** or **chains** to break or get out of order.

Ground wheels are provided with pawls and ratchets, permitting the machine to be turned or backed without affecting the feeds, and one or both ends of the machine may be disengaged from the feeding mechanism in an instant by releasing the pawls. This feature is very desirable in going to and from the field, or in sowing strips less than the width of the machine.

REMOVABLE ROTARY WING FEED—Even Distribution Assured.

The Van Brunt Lime and Fertilizer Sower is built with an improved rotary wing feed (none better). It has been thoroughly tested and is adapted to distribute crushed lime rock, slacked lime, all brands of standard commercial fertilizer, nitrate of soda, land plaster, granulated calcium chloride, dry wood ashes, etc., in any desired amount from 150 to 8,000 pounds per acre, according to bulk and weight of material.

The feed shafts are in two parts. By shifting one lever, both feed shafts may be lifted out and the hopper easily and thoroughly cleaned.

The double feed shaft with direct wheel drive allows the operator to disengage both feeds for transporting, or one-half the machine independent.

Price.....**$82.50**

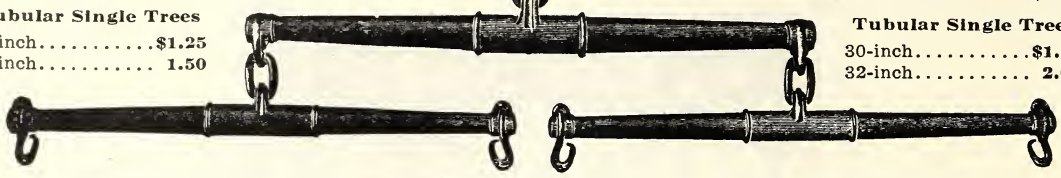
SEND FOR SPECIAL CATALOGUE

TUBULAR STEEL PLOW DOUBLE TREES

Can furnish these in sets complete, as shown in cut, or can furnish Single Trees separate. They are extensively used, both for farm plowing and by contractors for heavy work. They last a lifetime.

No. 0—Light, 33-in. Double Tree, 28-inch Single Trees; weight, 18 lbs. Per set.....**$4.25**
No. 1—Regular, 36-in. Double Tree, 30-in. Single Trees; weight, 20 lbs. Per set.....**$6.00**
No. 2—Heavy, 36-in. Double Tree, 32-in. Single Trees; weight, 25 lbs. Per set.....**$6.25**

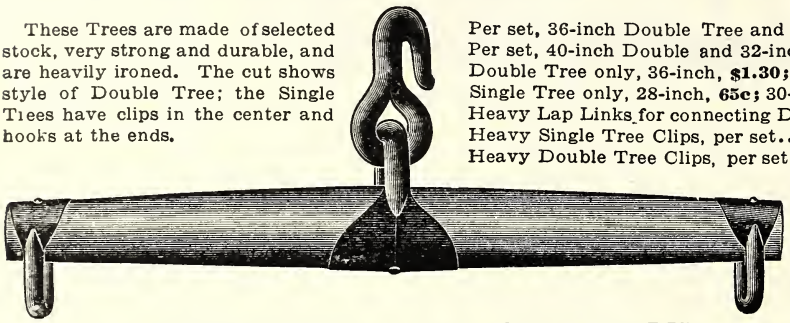
Tubular Single Trees
26-inch.....**$1.25**
28-inch..... **1.50**



Tubular Single Trees
30-inch.....**$1.75**
32-inch..... **2.00**

WOOD PLOW DOUBLE AND SINGLE TREES

These Trees are made of selected stock, very strong and durable, and are heavily ironed. The cut shows style of Double Tree; the Single Trees have clips in the center and hooks at the ends.



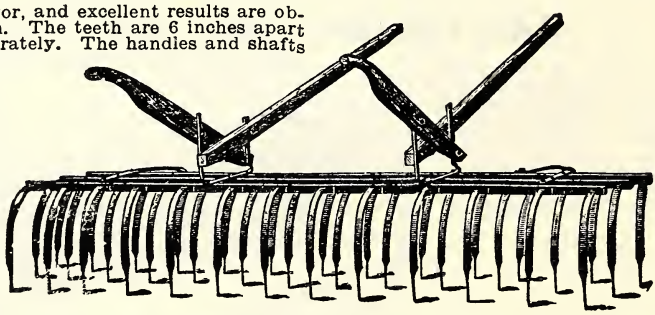
Per set, 36-inch Double Tree and 30-inch Single Tree.....**$3.00**
Per set, 40-inch Double and 32-inch Single Trees..... **3.50**
Double Tree only, 36-inch, **$1.30**; 40-inch..... **1.50**
Single Tree only, 28-inch, **65c**; 30-inch, **85c**; 32-inch..... **.90**
Heavy Lap Links for connecting Double and Single Trees, each. **.25**
Heavy Single Tree Clips, per set..... **.90**
Heavy Double Tree Clips, per set..... **1.15**

Wood Neck Yokes
Ironed complete, each.....**$1.50**

Extra-Heavy Plow Triple Trees
Each.....**$3.25**

THE HALLOCK QUADRUPLE WEEDER AND CULTIVATOR

This is a tool which has rapidly grown in favor, and excellent results are obtained from its use. The frame is of angle iron. The teeth are 6 inches apart on each frame and each tooth is bolted on separately. The handles and shafts are adjustable. The teeth are arranged so as to work the ground thoroughly, and also in a manner that permits trash to pass through. By removing 1 tooth, a space of 4 inches can be obtained over the row, and by removing 2 teeth a space of 6 inches can be obtained. On account of this feature the Weeder can be used for working narrow rows by taking out the proper number of teeth. This tool has been adopted and passed upon favorably by many of the most practical farmers.



Price.....**$15.00**

"OUR BEST" SINGLE SHOVEL PLOW

The design of this Plow is readily understood from the cut. It has a heavy steel beam of good quality and a broad steel shovel. One of the most valuable tools around the farm

Price.....**$4.25**

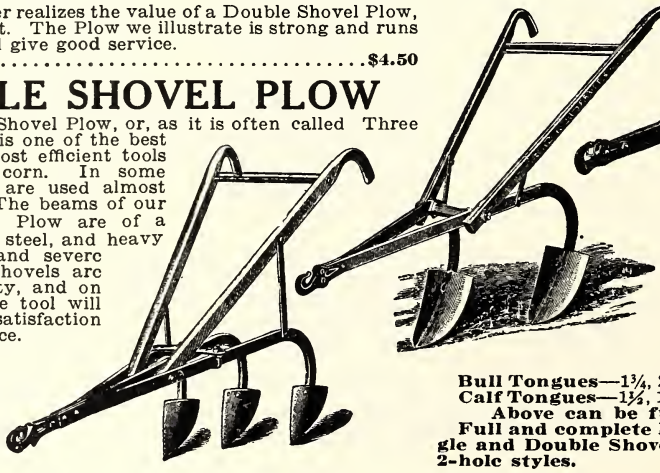
"OUR BEST" DOUBLE SHOVEL PLOW

Every farmer realizes the value of a Double Shovel Plow, with a good set. The Plow we illustrate is strong and runs nicely. It will give good service.

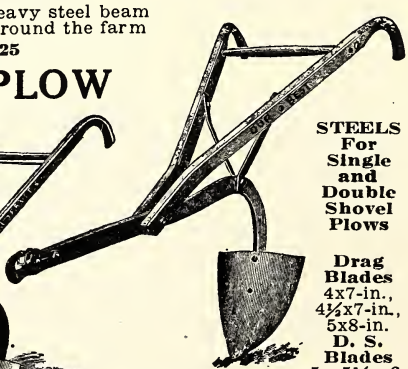
Price.....**$4.50**

TRIPLE SHOVEL PLOW

The Triple Shovel Plow, or, as it is often called Three Shovel Drag, is one of the best known and most efficient tools for working corn. In some sections they are used almost exclusively. The beams of our Triple Shovel Plow are of a good grade of steel, and heavy enough to stand severe work. The shovels are of good quality, and on the whole, the tool will give great satisfaction and long service.



Price...**$6.25**



STEELS For Single and Double Shovel Plows

Drag Blades 4x7-in., 4½x7-in., 5x8-in.

D. S. Blades 5, 5½, 6, 6½, 7-inch wide; 8, 10 and 11-inch long.

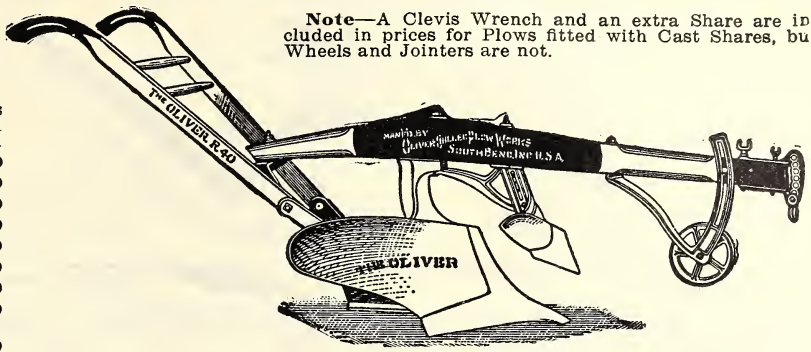
S. S. Blades
All sizes, from 8 to 18-inch wide by 11 to 16-inch long; in 1 and 2-hole.

Bull Tongues—1¾, 2 and 3-inch wide by 11-inch long.
Calf Tongues—1¼, 1¾ and 2-inch wide by 8-inch long.
Above can be furnished in 1 or 2-hole.
Full and complete line of Polished Steels for Single and Double Shovel Plows, made in both 1 and 2-hole styles.

GENUINE OLIVER PLOWS

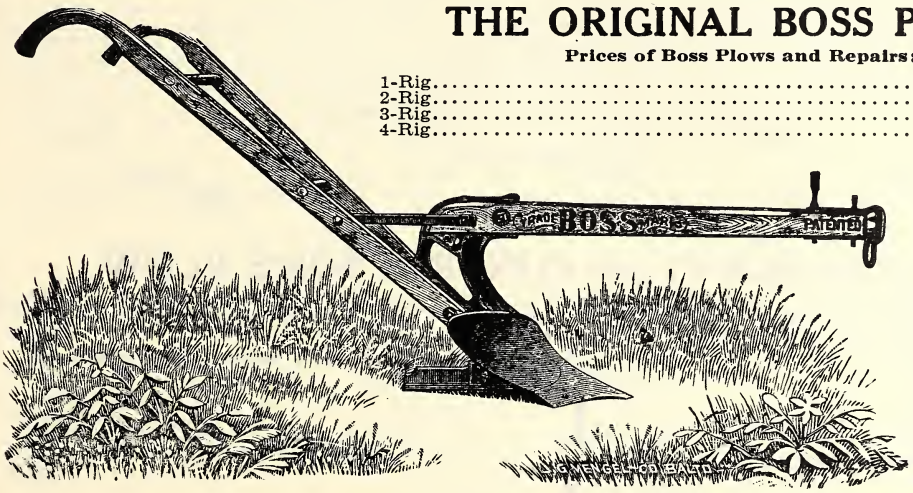
and Genuine Oliver Repairs

	Prices Steel Beam	Prices Wood Beam
A-1 and A-2	$10.50	$10.50
B-N	12.75	12.00
13-N	18.00	18.00
40-XX	.....	26.00
10-N	16.00	16.00
19-N	19.50	19.50
20-N	21.00	21.00
E-1-N	.....	24.00
40-N and 40-X-N	24.00	24.00



Note—A Clevis Wrench and an extra Share are included in prices for Plows fitted with Cast Shares, but Wheels and Jointers are not.

THE ORIGINAL BOSS PLOWS



Prices of Boss Plows and Repairs:

1-Rig	$ 7.50
2-Rig	8.50
3-Rig	9.50
4-Rig	10.50

Repairs:

1½ and 2½ Shares	$0.40
2½ and 3½ Shares	.45
20 Shares	.55
Landsides, No. 3	.60
Beams	1.00
Handles, per set	1.50
Handles, loose, etch	.65
1½ and 2½ Moulds	.70
2½ and 3½ Moulds	.85
20 Moulds	1.35

Price List of Chattanooga Plow Repairs

	Shares	Lands	Mould Boards
No. 62	$ .45	$ .70	$2.75
No. 63	.60	1.10	3.00
No. 64	.75	1.35	4.00
No. 65	.85	1.50	4.50
No. 66	.90	1.50	4.75

We Carry A Full Line of Plow Repairs

Mower Smooth Section, Knives and Guards

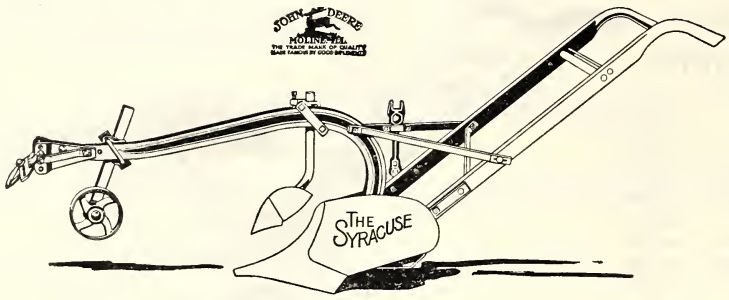
Made to Fit the Following Machines.	Size of Section.	Retail Price of Section.	Number of Guard.	Retail Price of Guard.	Number of Knife Head.	Retail Price of Knife Head.	Knives Complete 4½ Ft.	Knives Complete 5 Ft.	Pitman Boxes. Number.	Retail Price of Pitman Boxes.
Deering	3x3¼	$0.08	D698	$0.40	D463	$0.40	$3.00	$3.25	D711	$0.65
Deering	3x3¼	.08	D698	.40	F123	.45	3.00	3.25	D334	1.00
Deering	3x3⅛	.08	F1½	.40	F174	1.00	3.00	3.25	.....	....
Deering	2¼x3⅛	.08	F99½	.40	F74	1.00	3.00	3.25	.....	....
McCormick	3x3⅛	.08	M462	.40	M139	.40	3.00	3.25	M317	.65
McCormick	3x3⅛	.08	M253	.40	M139	.40	3.00	3.25	.....	....
Champion	3x3⅛	.08	A881	.40	A870	.40	3.00	3.25	B683½	.30
Champion	3x3⅛	.08	A41	.40	A415	.40	3.00	3.25	.....	....
Champion	3x3⅛	.08	A42	.40	A415	.40	3.00	3.25	A747	.75
Champion	3x3⅛	.08	A811	.40	A415	.40	3.00	3.25	.....	....
Osborne	3x3⅛	.08	K514	.40	K774	.40	3.00	3.25	K826	.80
Osborne	3x3 High Punch	.08	K280	.40	K284	.40	3.00	3.25	K278	.65
Osborne	3x3 Low Punch	.08	K72	.40	K212	.40	3.00	3.25	.....	....
Johnston	3x3⅜	.08	1811	.40	2211	.40	3.00	3.25	2207	.65
Johnston	3x3⅛	.08	77	.40	124	.40	3.00	3.25	257	1.00
Plano	3x3⅛	.08	J110	.40	J94	.40	3.00	3.25	J100–J99	.65
Milwaukee	3x3⅛	.08	PK5	.40	PG6	.40	3.00	3.25	PJ50	.80
Adriance Buckeye	3x3⅛	.08	3087	.40	557F	.45	3.00	3.25	.....	....
Akron Buckeye	3x3⅜ Low Punch	.08	775	.40	301	1.00	3.00	3.25	.....	....
Akron Buckeye	3x3⅜ High Punch	.08	775	.40	301	1.00	3.00	3.25	.....	....
Dain	3x3⅞	.08	Z5	.40	Z4	.40	3.00	3.25	Z162	.65

In ordering Knives complete, always give number of old Knife Head; also give number of cutting sections.

After Plowing the Ground be Sure to Plant The "Wisdom" Tomato, (See Page 23)

SYRACUSE STEEL AND WOOD BEAM PLOWS

WE CARRY A FULL LINE OF SYRACUSE PLOWS



Medium weight general purpose plows, having long moldboards of good turn and superior scouring qualities. The plows of this series are unsurpassed for use in hard, dry ground, in gravelly soil, or in stony fields where the ordinary plow cannot be kept in the ground. They will do good work when all other plows fail. In ordinary ground they will run alone, thus showing their perfect balance.

In the cut above is illustrated the straight landside construction. The rib along lower edge extends into furrow corner, holding plow to its work. The handles are straight at lower ends, permitting convenient replacement, and are attached high by combination braces and brackets, placing them out of the reach of trash. The lower attachment is adjustable, allowing a change in height to suit user.

Chilled moldboards made from our own mixture of irons, melted in a separate furnace and chilled by the Syracuse process, producing boards having absolutely no equal for scouring quality, strength and uniformity.

PRICES—Plows, Plain—Steel Beam Plows

No. 1461.....**$23.00** No. 1462.....**$22.00** No. 1463.....**$20.00**

One Horse Plows

No. 1466.....**$9.25** No. 1467.....**$10.25**

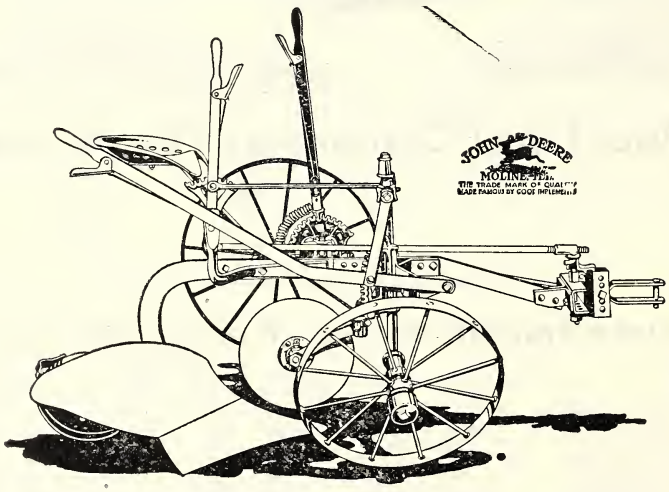
Jointers for above Two Horse Plow.....**$4.50**

Wheels for above Two Horse Plow..... **1.75**

No. 1-78 HEAVY, or CONTRACTOR'S PLOW

Similar to the No. 1-78, except that the wearing parts and beam are heavier, and it has two heavy iron braces running from the curve of the beam to the handles. This is an excellent plow for general grading purposes. It turns the same furrow as the regular No. 1. **Send for Prices.**

The Syracuse No. 210 Sulky can be equipped with solid bottom when desired. Fits perfectly Can be furnished with Disc Coulter



Rolling Landside Makes the No. 210 Sulky Lightest Draft

The rear of the No. 210 Plow is supported by the rolling landside—a feature original on Syracuse Plows. This rolling landside reduces draft to the minimum. It forms the third leg of the triangular rolling support, thus permitting all body and frame weight to be carried on three oiled bearings. It eliminates friction between the plow and the bottom of the furrow, and counteracts side pressure against the furrow wall.

Rolling Landside Increases Share Economy

Shares stay sharp and last longer on No. 210 Sulky than on other riding plows because the rolling landside prevents plow from running on its nose—a position ruinous to shares. It is also practically impossible to make this plow assume the functions of a sled—equally ruinous to share life and light draft.

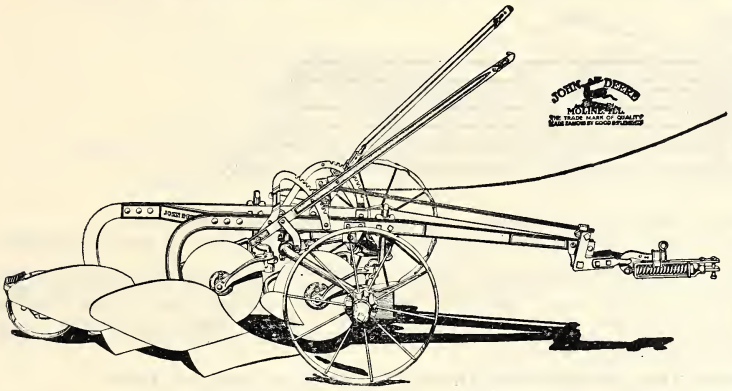
Rolling Landside Requires No Field Adjustment

This relation between the rolling landside and the share is permanent—it is "built in" in the factory. No adjustment in the field is ever required.

Can be furnished in 12" and 14" Bottom with Rolling Coulters or Jointers. Price.....**$62.00**

SEND FOR SPECIAL CATALOGUE

JOHN DEERE TRACTOR PLOW



Long, conveniently-reached levers make is easy to control depth and leveling accurately.

The power-lift is simple, and positive. It will stand the hardest, roughest work. It will last far longer than any ordinary power lift.

The land wheel, from which the power-lift operates, is solid and straight from tire to box on the inside; it does not pick up dirt or trash, thus it is a natural protection to clutch and driving parts. On a half turn of this wheel, the bottoms lift high and level—no digging into the ground or clogging with trash when turning the ends of the field.

When the bottoms are lowered, they enter the ground point first and penetrate quickly to plowing depth.

You Want Strong and Close-Fitting, Quick-Detachable Shares

Bottoms on the John Deere Nos. 5 and 6 are equipped with quick-detachable shares. The John Deere quick-detachable device is different from others and has important advantages.

You simply loosen one nut to remove a share; tighten the same nut and the share is on tight.

The nut is large and fits on a large, heavy-thread draw-bolt.

When drawn into place by turning the large nut, the John Deere quick-detachable share fits closely and stays tight—no loosening to give that "weaving" effect which increases draft and impairs work.

You Want An Easily-Operated Plow

You want a plow that can be operated with little effort on your part—a plow with no complicated mechanism—a plow of simple and positive adjustments.

The John Deere Nos. 5 and 6 meet those requirements.

The hitch is quickly and accurately adjustable up and down and to the side.

Price.....**$100.00**

SEND FOR SPECIAL CATALOGUE ON TRACTOR PLOWS

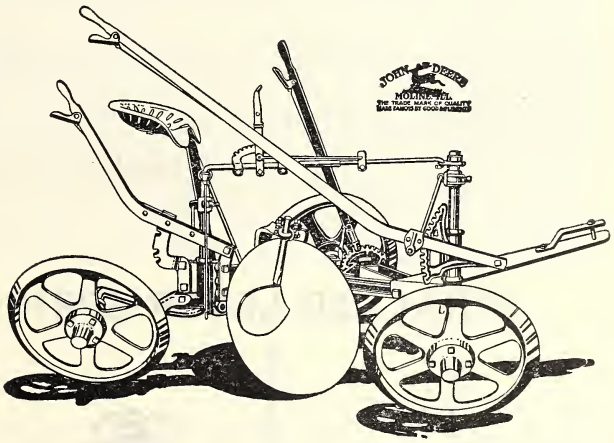
JOHN DEERE DISC PLOW - SINGLE

High-Grade Steel Discs Easily Adjustable for Width of Cut

The discs, made of high-grade steel, are designed for good penetration and cut clean. The disc faces are smooth, no bolts projecting.

Twenty-four inch discs are regularly supplied. Twenty-six inch discs are furnished on special order.

The discs may be set to cut eight, ten or twelve inches. On the single-disc, the adjustable front furrow axle provides the means for changing the width of cut. On the double and triple-disc, the front disc's width of cut can be changed by adjusting the front furrow axle, while the change can be made for the other discs by removing the connecting bolts and changing the positions of the beams to each other, marks on the beams indicating the different positions.

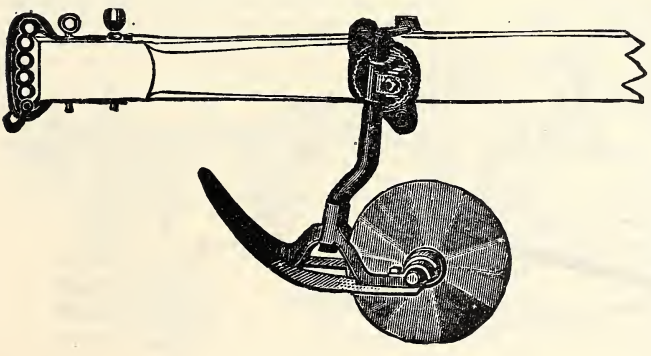


Bearings Keep Discs Revolving Freely

The discs are equipped with high-speed chilled bearings, oil-tight and dust-proof. These bearings insure long wear and easy running—they keep the discs revoling freely. The hub and sleeve are full-chilled; the sleeve is removable and can be replaced at small expense when worn.

The oil tube is provided with a hard oiler which forces the hard oil down into the bearing, keeping it running continually in a bath of oil, causing easy running and long wear.

Price 24" Disc.....**$100.00**



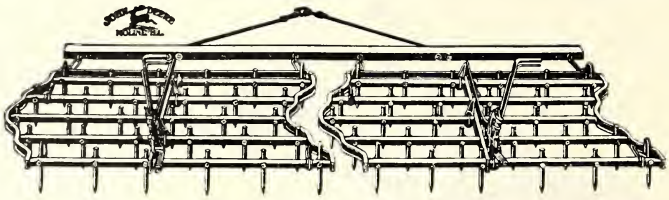
COULTER "MOON" ROLLING

The shoe presses down all weeds and trash and holds same firmly while being cut by the Coulter.

Prices:

No. 1— 8-inch disk.....**$5.50**
No. 2—10-inch disk..... **6.00**
No. 3—12-inch disk..... **7.00**

JOHN DEERE SPIKE-TOOTH HARROWS



Two-Section John Deere Spike-Tooth Harrow, Having 30 Teeth to a Section

This harrow is built in sections with 25, 30 or 35 teeth to the section, either ½-inch square or ⅝-inch diamond-shaped teeth.

The John Deere Sipke-Tooth Harrow is unusually strong for its weight. One reason for its great strength is that there are 2 stiffening bars in each section. The effect of these stiffening bars is to transmit any bending force which may come on a tooth beam to all of the other tooth beams in that section, making them all act together to resist bending. Thus it is practically impossible in ordinary work to bend a tooth beam on a John Deere Spike-Tooth Harrow. The tooth beams are very strong and are made of channel bar, thicker in the center than at the edges—a form which offers great resistance to twisting.

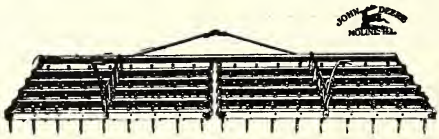
Three-Section John Deere Rigid Spike-Tooth Harrow—Teeth Are Securely Held

The teeth are held to the tooth bars by special steel clips which fit closely around the teeth, holding them into small notches in the edges of the tooth bars. These tooth clips are then drawn up tightly by means of two nuts which prevent them from working loose and make it practically impossible for a tooth to twist around, drop out and become lost. Each of the steel teeth is complete in itself, well made, with a head formed at the top so that the tooth cannot drop through the clip. Four runner teeth are furnished with each section, and are used as transports when moving the harrow from one field to another, making it unnecessary to take the implement down and load it on a wagon.

50-Tooth ⅝ Spikes Harrow.....**$21.00** 60-Tooth ⅝ Spikes Harrow.....**$23.00**

90-Tooth ⅝ Spikes Harrow.....**$40.00**

JOHN DEERE WOOD-BAR SQUARE END HARROW



When you buy a wood-bar harrow, you want it to last a long time. The longer it lasts, the less it costs and the more it pays. Be sure the harrow you buy has the best quality wood—its life is strictly dependent on that quality.

The John Deere Wood-Bar Harrow is made of carefully selected, thoroughly seasoned oak. It is unusually strong and long-lived.

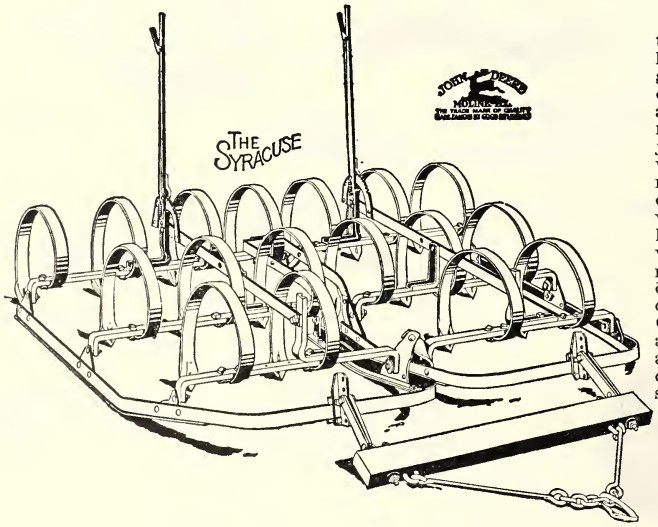
The tooth bars are riveted at each tooth. They hold the teeth firmly and do not warp. The ends of the tooth bars have a strong and durable connection to the side arms.

Teeth are the strong standardized square type set close together—this harrow puts land in finest condition. Handy levers control setting of teeth.

Sizes Wood-Bar Square-End Harrow

Section	Number of Teeth	Width
Two	84	10 feet
Three	126	15 feet
Four	168	20 feet

SYRACUSE LEVER SPRING TOOTH HARROW



The frame bars of angle steel, thoroughly protected by steel shoes, which double the life of the harrow. Inside frame bars raised at the end, giving free outlet to trash. Frame with small opening in front, absolutely preventing loading at this point, which is so common with other makes. The tooth bars are of channel steel, journaled in malleable brackets above the frame, which gives the teeth high support and great range or adjustment for depth of cultivation and clearance. Spring teeth of high carbon steel, without bolt holes, and held by malleable holders, allowing for separate adjustment when worn. By use of the levers the teeth can be readily set deep or shallow, or can be thrown out of the ground to clear off trash and for dragging harrow from one place to another. Central and direct draft without side motion; adjustable hitch, so that the teeth at the front and rear can be regulated to work at the same depth. No spring-tooth harrow made is giving such universal satisfaction.

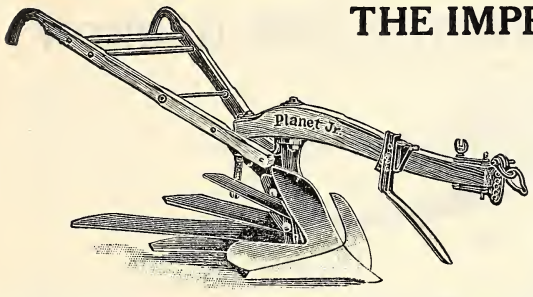
Prices:

15-Tooth.....**$26.00**

17-Tooth.....**28.00**

23-Tooth.....**40.00**

25-Tooth.....**42.00**



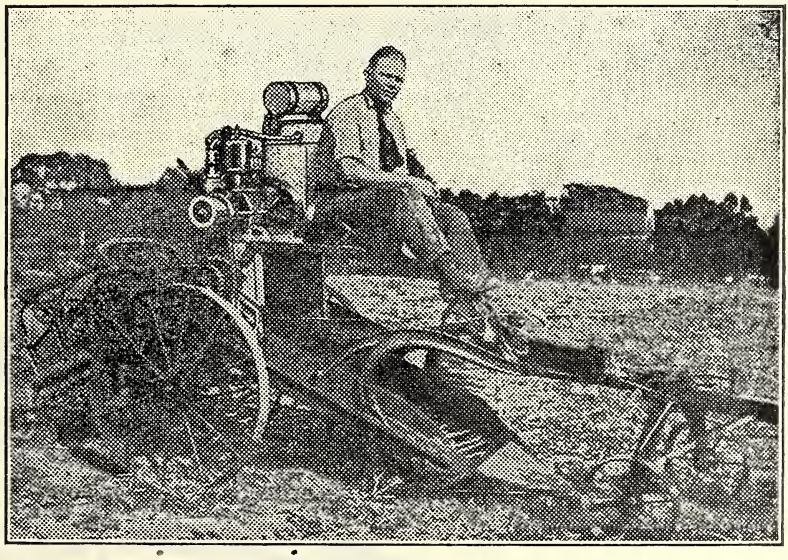
THE IMPROVED "PLANET JR." WHITE POTATO DIGGER

The "Planet Jr." White Potato Digger has been greatly improved recently. Instead of a digging head of tines it now consists of successive shares, which cut the furrow turned on edge by the front share and moldboard into horizontal slices, throwing the vines and weeds to one side and pushing the potatoes to the surface.

Doubtless you would like us to say how they compare with the various four-horse diggers on the market. To answer this, the "Planet Jr." White Potato Digger is equal to any for digging early, when the vines are green, the potatoes fast to them and the ground clean A little later on, when the vines are dead and the ground fairly free from weeds, the four-horse diggers do better work in some cases, the crop being picked up more easily after them. At a later stage, when the field grows very grassy and weedy, the four-horse tools are almost useless, while the "Planet Jr." even then does its work fairly well. If compelled to use but one digger the season through, the "Planet Jr." is the best. It costs but one-fourth or one-fifth as much, takes less than half the power to draw it; **DOES NOT SKIN THE POTATOES,** digs faster and costs about one-twentieth as much for repairs, and it will last almost a lifetime, with a few new shares and landsides. Packed weight, 143 pounds. Price..... **$42.50**

No. 300 "HOOVER" POTATO DIGGER WITH AGITATING REAR RACK AND VINE SEPARATOR

To meet the various conditions under which potatoes are grown, it was necessary to build several styles and sizes of machines. In making the changes and improvements necessary to the universal use of the "Hoover" they were designed so that two general or main frames would be the basis to which could be added the different attachments for the various styles and sizes that are necessary for the successful harvesting of the crop. The frames are 6 and 7 feet long and of two widths, 20 and 22-inch. The following general description of the construction of the "Hoover" should convince you that nothing but the best of material and workmanship is used in their construction, which in connection with the inventive genius, which is constantly used for their betterment, puts them in a class by themselves, and about five years ahead of all imitations.



Four-Horsepower Cushman Engine on a Hoover Digger

SPECIFICATIONS:

Truck—Double-acting, with 14-inch steel wheels provided with removable hubs and bearings.

Frame—22 inches wide, 6 feet long (elevator 5 feet long). Sides made of special Tee steel rolled exclusively for the "Hoover." Malleable pieces for attaching shovel and axle are riveted solidly to the Tee steel sides.

Shovel—High carbon crucible steel.

Elevator—Rod type, made of ⅜-inch high carbon spring steel with every alternate link raised and lowered. (7-16-inch steel furnished when so ordered.)

Bearings—2½-inch roller bearings on main elevator shaft with compression grease cups, 2-inch roller bearings on elevator idlers and pitman shaft. All other idlers run on pipe bearings.

Wheels—30-inch diameter, 3-inch tire. Staggered spokes and removable hubs.

Tread—Main wheels, 37 inches; trucks, 31½ inches.

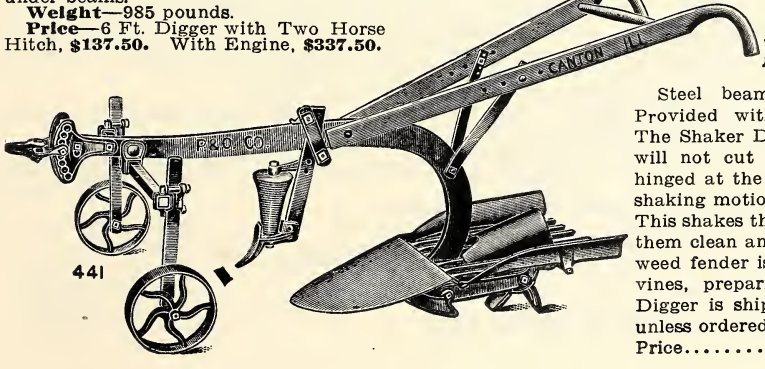
Drive Chains—Heavy Locke tempered steel running on forged and tempered steel sprockets on main elevator shaft.

Rear Rack—Agitating with vine separating rods and forks. Hangers supporting potato or rod rack swing on pipe bearings. Pitmans agitating potato or rod rack are oval steel with wood bearings. Pitman shaft ⅞-inch cold rolled steel with 2-inch roller bearings and dirt-proof pipe covering screwed in bearing castings. Vine forks revolve on high carbon steel crank provided with removable bearings.

Clearance—19 inches under truck; 15 inches under beams.

Weight—985 pounds.

Price—6 Ft. Digger with Two Horse Hitch, **$137.50.** With Engine, **$337.50.**



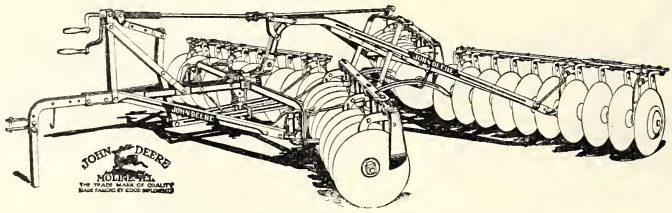
SHAKER POTATO DIGGER

Steel beam. Natural temper steel blades. Provided with weed fender and gauge wheel. The Shaker Digger has a perfectly flat blade and will not cut the potatoes. The rod grating is hinged at the front and is given an up-and-down shaking motion by the sprocket wheel at the rear. This shakes the dirt off from the tubers and leaves them clean and whole on top of the ground. The weed fender is intended to clear away weeds and vines, preparing the way for the blade. The Digger is shipped with gauge wheel and fender, unless ordered without.

Price..... **$30.00**

JOHN DEERE MODEL L TRACTOR DISK HARROW

STRONGER AND BETTER THAN EVER



John Deere Model L 8-foot Disk Harrow

Now, the John Deere Model L Tractor Disk Harrow is stronger and better than ever.

In addition to all the good qualities embodied in the original Model L, new and important improvements have been made which make more effective the exclusive working features that have long identified the Model L as an outstanding favorite.

A wider and heavier frame; angle iron main frame braces instead of flat bars; pivot connection between the main frame and gangs; new pivoted yoke and draw-bar guide; increased carbon in steel wearing parts; heat-treated disk blades—these are some of the improvements which combine to make a stronger and heavier harrow that does better work and lasts longer.

Heat-Treated Alloy Steel Disk Blades

The disk blades now furnished on all John Deere Disk Harrows are made of long-wearing alloy steel which is used extensively in the manufacture of automobile parts that are under heavy strain. The blades are carefully heat-treated after they are formed. This gives an even stronger blade than the high carbon steel disks which have heretofore been furnished on John Deere Harrows.

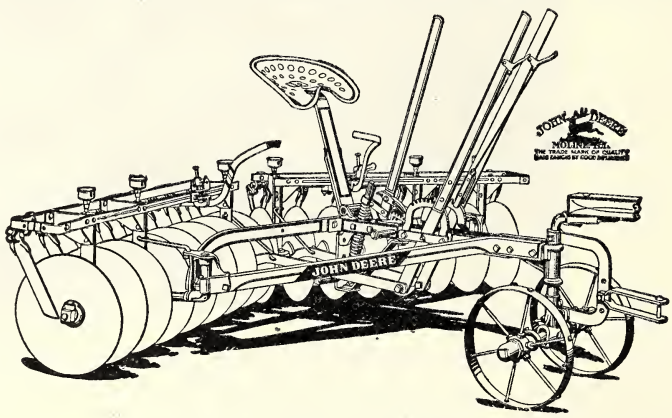
The heat-treated blade is unusually close grained, which combines hardness with toughness. Thus the blade holds its edge, stays sharp and lasts longer, especially when working in tough, hard or stony soil.

All of the superior points of construction which have contributed to the remarkable success and efficiency of the Model L have been retained—the convenient angling cranks, automatic yielding lock coupling, aligning device, and the flexibility of the harrow itself—all of which make good work certain under varying field conditions.

Prices on Model L Tractor Disc Harrows

24-16—6 ft. Cut.....**$120.00**	28-16—7 ft. Cut.....**$127.00**
24-18—6 ft. Cut..... **128.00**	28-18—7 ft. Cut..... **138.00**

JOHN DEERE MODEL B DISK HARROW



John Deere Model B 7-foot Harrow

If every field were as smoth as a board floor, flexibility would be of no advantage in a disk harrow. But the truth is there is no field condition in which a flexible harrow will not do better work than a rigid one. A disk harrow must be flexible to do the best work.

Independent action of the gangs is largely responsible for the flexibility of the Model B. This construction is of great value because it allows one part of the harrow to pass over an obstruction in the field without interfering with the rest of the machine. A rigid harrow, under the same conditions, is likely to leave some of the land uncultivated.

Separate angling levers enable the operator to give the gangs the proper angle with relation to each other when working on hillsides, so the harrow does not crowd in any direction.

When overlapping, with one gang running in hard ground and the other gang in soft ground, the single-lever harrow tends to crowd towards the soft ground, due to the greater resistance offered by the hard ground. This fault is readily overcome with the Model B by giving the gang working in soft ground slightly more angle.

Spring Pressure and Third Lever Have Many Advantages

The control of the Model B, so that it will penetrate evenly its entire width in any kind of ground, is made extremely simple and positive by the spring-pressure third lever feature.

The Model B has a pivoted yoke through which the drawbars pass. This yoke is controlled in its up-and-down movements by a third lever and powerful pressure spring. When this third spring-pressure lever is pulled back, the inner ends of the gang are forced down to work in depressions and dead furrows, or to give extra pressure in hard ground.

Prices on Model B Disc Harrows

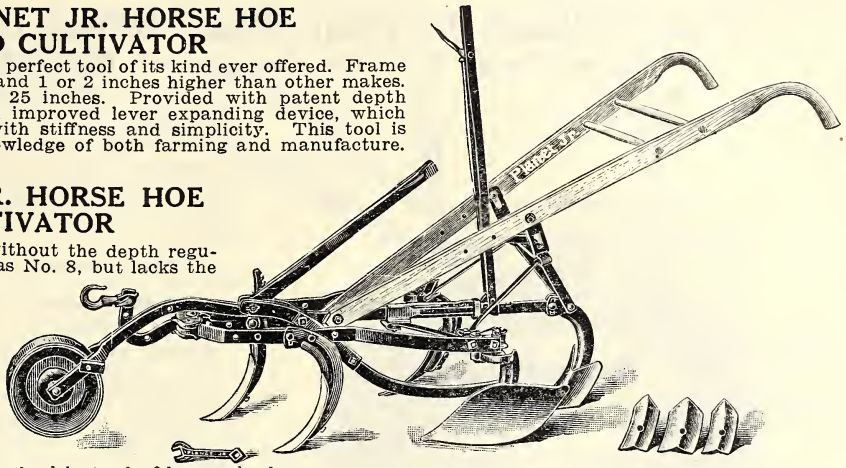
8-16—4 ft. Cut.....**$48.00**	10-16—5 ft. Cut.....**$52.00**
8-18—4 ft. Cut..... **51.00**	10-18—5 ft. Cut..... **55.00**
Fore Carriages.....**$10.00**	

No. 8 PLANET JR. HORSE HOE AND CULTIVATOR

This is the best and most perfect tool of its kind ever offered. Frame is of stiff steel, extra long and 1 or 2 inches higher than other makes. Closes to 9 and opens to 25 inches. Provided with patent depth regulator, lever wheel and improved lever expanding device, which combines great strength with stiffness and simplicity. This tool is the result of thorough knowledge of both farming and manufacture.
Price, $16.25.

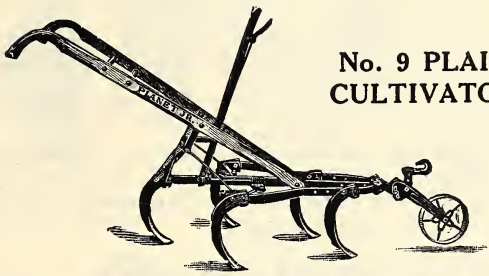
No. 7 PLANET JR. HORSE HOE AND CULTIVATOR

This tool is the No. 8 without the depth regulator. It works the same as No. 8, but lacks the perfect steadiness and control of depth made possible by the depth regulator.
Price, $15.75.



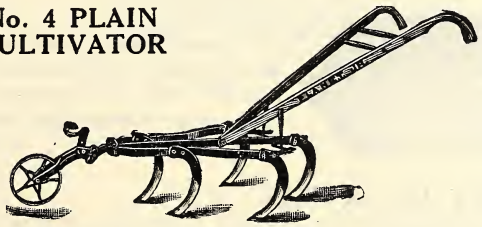
No. 9 PLANET JR. HORSE HOE AND CULTIVATOR

Identical with the No. 8, except that it has no depth regulator, and plain wheel instead of lever wheel.
Price—With wheel, **$14.25**; without wheel, **$12.25.**



No. 9 PLAIN CULTIVATOR

The No. 9 is well built and of the right design. The especially hardened beveled steel teeth keep sharp and give 50B more service. The No. 9 is light, yet strong, with steel wheel, hollow steel standards, and steel draft hook. At once simple and practical, it is always ready for work year after year.
Price—With wheel, **$12.75**; without wheel, **$10.75.**



No. 4 PLAIN CULTIVATOR

No. 4 Cultivator. This very popular tool is strong, plain, simple, business-like and does its work to perfection Has extra high, round-throated, hollow steel standards with patent beveled steel teeth, and expanders which make an extra stiff tool, yet allow quick adjustment for width. One side may be closed while the other is left open for special work close to the row. Satisfactory in every respect. An every-day, all-day tool.
Price—With wheel, **$10.50**; without wheel, **$8.50.**

PLAIN CULTIVATORS

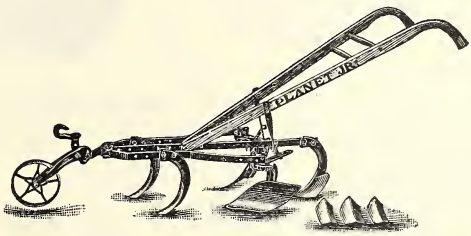
No. 4, with wheel	$10.50
No. 4-D, no wheel	8.50
No. 9, with wheel	12.75
No. 9-D, no wheel	10.75
No. 83, with wheel	14.25
No. 83-D, no wheel	12.25
No. 100, with wheel	9.25
No. 100-D, no wheel	7.50
No. 101, with wheel	11.00
No. 101-D, no wheel	9.25
No. 107, with wheel	12.75
No. 107-D, no wheel	11.00

No. 90 PLANET JR. 12-TOOTH HARROW, CULTIVATOR AND PULVERIZER

This tool has rapidly grown in favor among strawberry growers, market gardeners, truckers and farmers. This is because the 12 chisel-shaped teeth do such thorough work, and at the same time do not throw the earth on small plants, and because the tool is so convenient, durable and strong. With this tool you can do such a fine grade of work, and such a variety, that it is really a very valuable tool, and it will be to the interest of farmers to send for catalogue fully describing it. Price,

No. 90 Complete	$17.00
No. 90 B. Less Pulverizer	13.75
No. 90 Plain	10.75
No. 91 With Wheel	12.75
No. 92 Plain	9.75

No. 4 PLANET JR. HORSE HOE



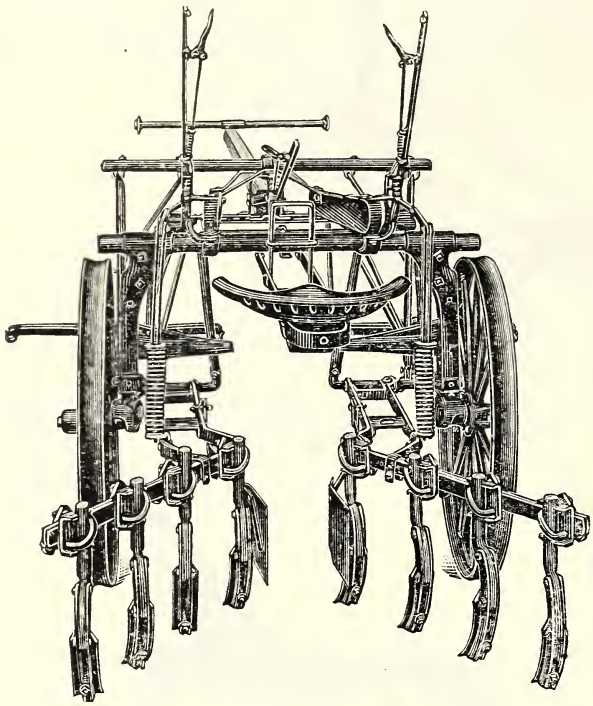
This tool is low in price, strong and simple; provided with patent handle braces; firm, simple, strong, convenient. With these, the frame and handles seem almost like one solid piece. Changes in width are very quickly and easily made by the patent expanders, and one side may be opened wide and the other closed. Furnished with or without wheel.
Price—With wheel, **$12.25**; without wheel **$10.25.**

HORSE HOES.

No. 4, with wheel	$12.25
No. 4-D, no wheel	10.25
No. 7	15.75
No. 8	16.25
No. 9, with wheel	14.25
No. 9-D, no wheel	12.25
No. 80, with wheel	15.50
No. 82, with wheel	15.75
No. 82-D, no wheel	13.75

No. 70 Planet Jr. Pivot Wheel Riding Cultivator

Strong though light; Not Complicated; Easily Handled



The No. 70 Planet Jr. Pivot Wheel Riding Cultivator made so many friends some years ago that they have convinced us that this light and easily handled riding cultivator should be made again.

Springs on the lever connecting pieces enable the driver to set the teeth any depth he may choose, while still on the headland, instead of having to wait until part way up the row; and the spring tension allows the teeth to adjust themselves to uneven surfaces

The **Pivot Wheels** make steering easy; act quickly and enable the operator to follow uneven rows.

The **Gang Frames** are made of special stiff steel, are thoroughly braced, and are adjustable sidewise on the arch to and from the row.

The No. 70 cultivates all rows from 28 in. to 48 in. apart. The Wheels close to 32 in. and open to 40 in.

The **Standards** are steel and carry eight 10 x 2¼ inch specially hardened Planet Jr. bevel steel cultivator teeth. The standards are rigidly held in any desired position by new steel clamps with heavy bolts, pre-venting the standards from twisting or working loose.

The **Tongue** is hinged to the frame and is operated by a lever, so as to regulate the depth of the gang in front perfectly, while two other convenient levers govern the depth of the gangs in the rear with the greatest accuracy.

The **Seat** is adjustable backward and forward to suit man or boy, and also in height; it can be dropped so low that the operator can uncover small plants from the seat.

The **Wheels** have broad concave tires, renewable boxes, renewable pivots and dust caps and are made of steel with welded spokes.

In **design, quality of material,** and **workmanship,** and general usefulness, the No. 70 Pivot Wheel Riding Cultivator is a typical Planet Jr. implement; and its **lightness** and **simplicity** in operation will convince you that it is a good tool for your work. **Price $77.50.**

The New No. 77 Planet Jr. Pivot Wheel Cultivator

The No. 77 Pivot Wheel Riding Cultivator is new for 1924 and although not perfected until late last season field trials demonstrated its many improvements over any other similar cultivator. Briefly these consist of a clear view of the row in front of the Wheel Axle frame and a better view behind this frame between seat bars; gangs are raised without pulling back against the team. Gang lifting levers are in a more convenient position and the gang is lowered and spring compressed by one motion. Front end of gang is adjusted separately, a lever for each gang. Tongue is rigid with the frame at all times making the frame always practically level. There are a number of other minor improvements which make this the best all round one row riding cultivator. It is made almost entirely of steel and castings where absolutely necessary are malleable. **No. 77-D Plain, $80.00.**

TO DETERMINE THE QUALITY OF A CULTIVATING STEEL

Look on the Back

If it reads

You can depend upon it being the Standard of Quality and Design and an assurance of long and satisfactory service.

GENUINE PLANET JR. EXTRAS

	Price.	Weight Lbs.	Oz.
1¼ x 8-inch Steels	$0.17		11
1¾ x 8-inch Steels	.18		11
2¼ x 8-inch Steels	.20		12
3 x 8-inch Steels	.22		14
4 x 8-inch Steels	.27	1	2
10-inch Steels fit all Planet Jr. Two-Horse Cultivators, excepting No. 72.			
1¼ x 10-inch Steels	$0.19		13
1¾ x 10-inch Steels	.22		14
2¼ x 10-inch Steels	.24	1	
3 x 10-inch Steels	.28	1	1
4 x 10-inch Steels	.32	1	8
1¾ x 9-inch Alfalfa Teeth and Bolt	.40	1	2
Shovel Steels fit all Planet Jr. One and Two-Horse Cultivators.			
7-inch Shovel Steel	$0.35	1	9
8-inch Shovel Steel	.40	1	12
Hillers and Plows fit all Planet Jr. One and Two-Horse Cultivators, excepting Twelve-Tooth Harrow.			
6-in. Hillers. Per pair	$2.30	4	10
7-in. Plows. Per pair	2.60	5	2

Regular Sweeps fit all Planet Jr. One and Two-Horse Cultivators.

	Price.	Weight Lbs.	Oz.
6-inch Sweep	$0.40		14
8-inch Sweep	.43	1	4
10-inch Sweep	.46	1	6
12-inch Sweep	.52	1	9
15-inch Sweep	.70	1	14
18-inch Sweep	.85	2	2
24-inch Sweep	2.00	2	13
Per Pair.			
8-inch 1-Sided Sweeps	$1.00	2	4
9½-in. 1-Sided Sweeps	1.10	2	8
11-inch 1-Sided Sweeps	1.20	2	12
Irrigation Steels and Turning Shovels fit all Planet Jr. Cultivators.			
Irrigation Steel	$1.50	4	2
Per Pair.			
6-inch Turning Shovels	$0.85	3	
5-inch Turning Shovels	.75	2	
7-inch Turning Shovels	1.00	4	

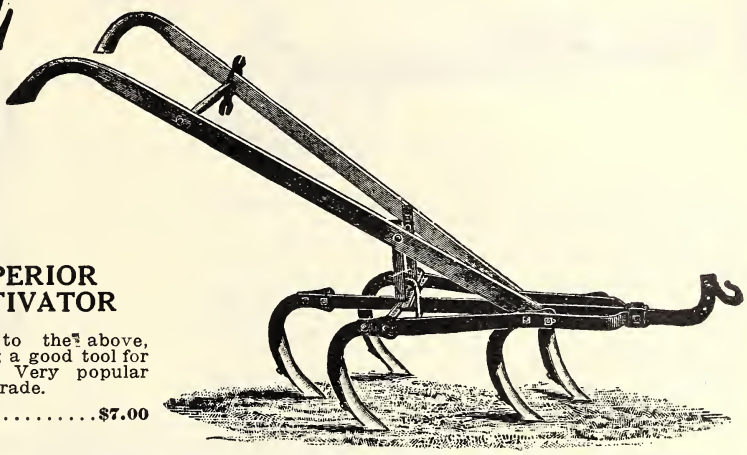
Hoe Steels fit Planet Jr. Horse Hoe Side Standards.

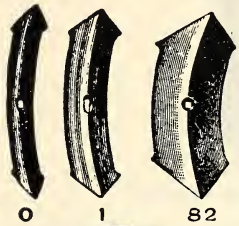
	Price. Per Pair.	Weight Lbs.	Oz.
6-in. Hoe Steel & Bolt	$1.30	2	10
10-in. Hoe Steel & Bolt	1.50	3	12
Beet Hoe Steels fit Planet Jr. Two and Four-Row Beet Cultivators and Twelve-Tooth Harrows.	**Per Pair.**		
6-in. Beet Hoe Steels	1.40	3	4
7-in. Beet Hoe Steels	1.40	3	
Improved Flat Sweeps fit all Planet Jr. One and Two-Horse Cultivators Standards, excepting Horse Hoe Side Standards.			
3-in. Imp. Sweep & Bolt	$0.42		
5-in. Imp. Sweep & Bolt	.50		
8-in. Imp. Sweep & Bolt	.60	1	
10-in. Imp. Sweep & Bolt	.70	1	
12-in. Imp. Sweep & Bolt	.85	1	
15-in. Imp. Sweep & Bolt	1.00	2	
18-in. Imp. Sweep & Bolt	1.30	2	
24-in. Imp. Sweep & Bolt	2.75	3	

IRON AGE

BENT FRAME CULTIVATOR

To those who desire a Cultivator a little lighter and lower-priced than the "Planet Jr." we offer this one as a thoroughly reliable tool, from the standpoint of construction and material as well as working qualities.
Price of Plain Cultivator.....**$6.00**
Horse Hoe attachments..... **4.00**





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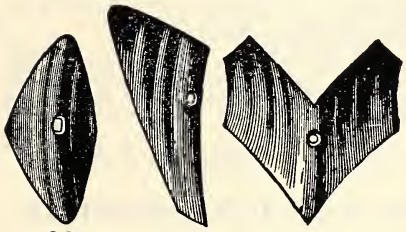
SUPERIOR CULTIVATOR

Similar to the above, but lighter; a good tool for light soil. Very popular with our trade.

Price.....**$7.00**

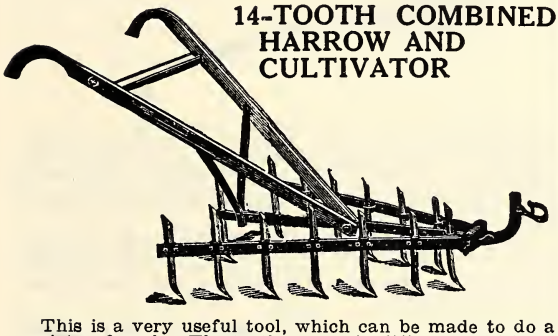


68 10 11

IRON AGE CULTIVATOR POINTS AND EXTRAS

No. 0—1¼ inches wide. Each	**$0.16**
No. 1—2 inches wide. Each	**.18**
No. 82—3 inches wide. Each	**.22**
No. 68—Oval or Jersey. Each	**.25**
No. 10—Turn Shovels, either right or left-hand. Each	**.50**
No. 11—Turn Shovels, 6 inches wide	**.70**
Horse Hoe Steels, right or left. Each	**.85**
Levelers for Cultivators	**2.00**
Wheels for Cultivators	**2.00**
Cultivator Plate Bolts	**.05**
Cultivator Frame Bolts	**.05**
Cultivator Handles. Per pair	**2.00**
Teeth for Combined Harrow	**.28**

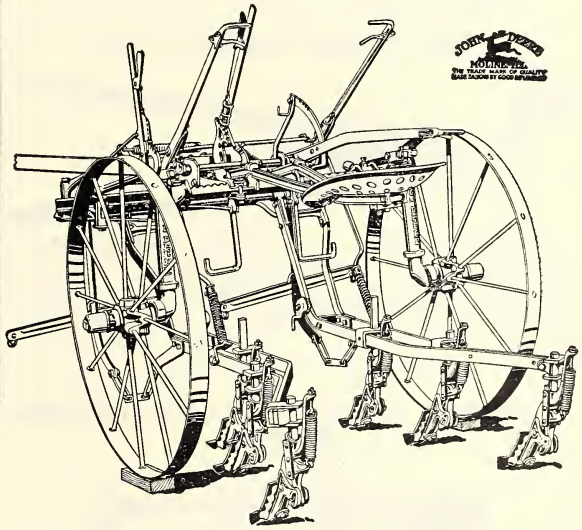
14-TOOTH COMBINED HARROW AND CULTIVATOR



This is a very useful tool, which can be made to do a variety of work. The teeth are set in different positions. Desirable for first cultivation. Price, plain, **$7.50**; with ever, **$9.50.**

THE KH MAKES GOOD WORK EASY

From the moment you get on the seat of the KH, you will appreciate the exceptional ease of operating this cultivator.



This picture shows the John Deere KH equipped with No. 179, six-shovel, spring-trip aligned rigs.

Raising and lowering the rigs, fixing depth, spacing the rigs the desired distance from the row, regulating the set and suck of the shovels or sweeps exactly right under all conditions, and dodging on crooked rows are all accomplished quickly and easily without stopping the team. You will be sure to like the handy lever control.

Balances Perfectly—With the master lever, you raise or lower both rigs. The correctly-attached lifting spring makes the operation of the master lever easy. When the rigs are raised for turning, the cultivator is perfectly balanced. The pole does not fly up. Because of the perfect balance, both you and the team are comfortable.

When you lower the rigs by releasing the master lever, all shovels enter the ground level.

Space Rigs with Lever—By means of the spread lever, you space the rigs for distance of cultivation from the row. The rigs spread equally at front and back.

Prices:

6 Shovel Spring Trip Cultivator.....	**$66.00**	6 Shovel Pin Brake Cultivator.....	**$60.00**
8 Shovel Spring Trip Cultivator.....	**70.00**	8 Shovel Pin Brake Cultivator.....	**62.00**

SEND FOR SPECIAL CATALOGUE

Plant the "Wisdom" Tomato (See page 23)

IMPROVED HAND SPRAYER

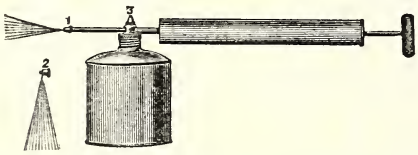
It is adapted for the destroying of insects, applying disinfectants to buildings, bushes, etc.; also for applying fly chasers to animals and applying light floor oil.

The Improved Sprayer is absolutely the best constructed Sprayer of its class ever offered. For strength and durability, it has no equal. The tapering point to the air chamber gives powerful force to the Spray, carrying it to the greatest possible distance. The tapering tube of air chamber is passed through the reservoir and soldered to it. The point of the air chamber and small tube through which the liquid passes are thoroughly protected from damage in use and shipping.

The piston rod is a heavy steel spring wire with cup leather plunger.

Price 50c; by P. P. 60c

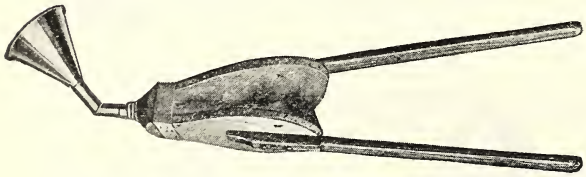
HAND SPRAYER-Continuous



Made of the best material in galvanized and brass. 1 quart capacity, has two sprays, one straight and one 45 angle, to allow spraying under leaves. Hand soldered. No leak.

Galvanized.....**$1.50; by P. P. $1.60**
Brass.....**$1.75; by P. P. $1.85**

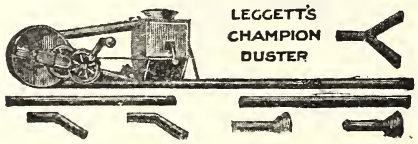
THE ACME POWDER GUN



Consists of a tight valveless bellows equipped with a distributing tube or nozzle, a funnel, a spreader for diffusing the spray and an elbow for placing the spray on the underside of the leaves. Handles of convenient length and bellows of fine russet leather. A very practical and convenient way of applying Paris Green, Lice Killers, Insect Powder, etc. Parcel post weight 2 pounds.

Price $1.50; by P. P. $1.60

LEGGETT'S CHAMPION DRY POWDER DUSTER



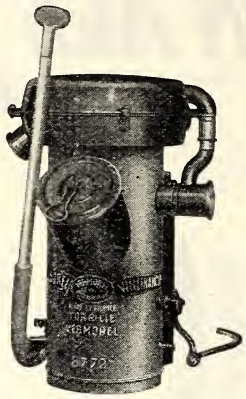
For farm, garden, vineyard, tobacco fields, etc. Adjustable to any width of row. Many thousands in use. Distributes Paris Green, London Purple, Hellebore, Sulphur Lime, Dry Bordeaux Mixture and Pyretheum Powder, etc.

Dusts Potato Vines as fast as you walk, two rows at a time. Illustration shows tubing and nozzles. Any one can use it. Weighs, cased for shipping 17 pounds.

This machine keeps the poison at a safe distance from the operator.

Price $15.00; by P. P. $15.25

VERMOREL DUSTERS (Bellows Type)



Vermorel Double Duster

For applying Sulphur, Arsenate of Lead, Calcium Arsenate, Bordeaux Mixture, Nicotine Dust, etc.

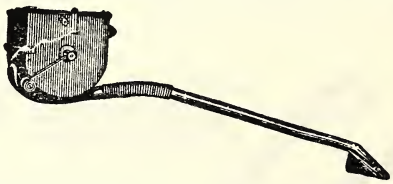
Made in both single and double action.

Very light and compact in construction. Weight eleven pounds; capacity six quarts, nine to fifteen pounds of material. Double action differs from single principally in the fact that it functions both on the up and down strokes, thus giving forth a semi-continuous flow.

Price

Single Action.....**$15.00; by P. P. $15.25**
Double Action..... **20.00; by P. P. 20.25**

NIAGARA HAND DUST MACHINES



Many growers have an acreage insufficient to warrant the purchase of a large duster; yet somekind of an inexpensive, practical device must be procured for the application of insecticides and fungicides to growing crops in order to protect them from injurious pests. It is for these growers that the **Niagara Blower Dust Gun** is especially designed.

This is the ideal machine for low crops. In one hour it dusts ½ acre of potatoes, celery, strawberries and like crops. It is easily and quickly used on young orchards, vineyards and shrubs, and by florists' and home garden ornamental plants.

Price

Single Row.....**$22.00; by P. P. $22.25**
Y-Attachment to make Double Row.....**$2.00 extra**

VERMOREL KNAPSACK SPRAYER

The most perfect hand sprayer yet invented. For simplicity, efficiency, durability, and lightness there is nothing to equal it, guaranteed to give entire satisfaction, or can be returned at our expense.

Price, $20.00

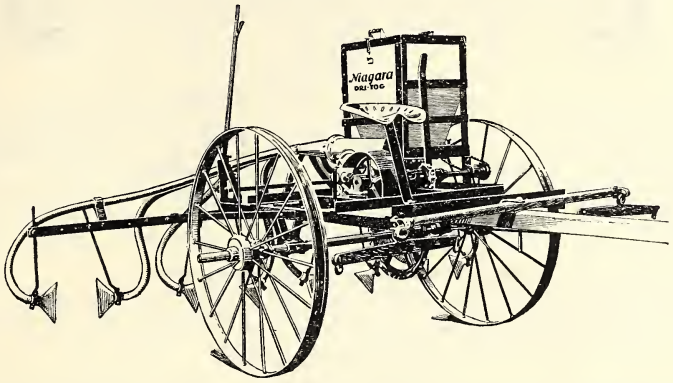
All Prices Subject to Change Without Notice

NIAGARA SPRAYER COMPANY

"DRI FOG" CROP DUSTER

For Control of Blight and Insects

For Field and Orchard Work



The following is a detailed description of the Niagara Crop Duster

The hopper is made of heavy sheet steel, and has a capacity of 7,000 cubic inches. It will hold approximately 125 pounds of Copper Lime Potato Dust, or 100 pounds of Calcium Arsenate. The whole top of the hopper constitutes the lid and is instantly removable. It is held in place by a side clasp, similar to those holding down the hood of an automobile. When the lid is open for filling, the opening is 18 x 22 inches. The employment of the FORCE FEED PRINCIPLE together with the suction from the fan, eliminates the possibility of back draft, and if there were need of doing so, the machine could be operated with the lid entirely off the hopper without any reaction. This large 18 x 22 inch opening at the top of the hopper also renders accessible the units of the agitating and feeding system.

Distributing System

The dust is THOROUGHLY MIXED in the fan case and discharged through A STAGGERED EIGHT-WAY DISTRIBUTION. This STAGGERED EIGHT-WAY DISTRIBUTOR which is an EXCLUSIVE NIAGARA FEATURE, equally divides the dust mixture into eight parts. This eight-way distributor is the key to the equal distribution which marks the performance of this duster. Each nozzle therefore will put out an equal amount of dust.

If potato growers are to control blight and bugs, or if bean growers are to control anthracnose MEXICAN BEAN BEETLE, they must insist that **every plant** in **every row** is covered with the correct dust. If one plant is missed, or because of faulty distribution, is not covered with sufficient dust it becomes a source of infestation for the remainder of the planting.

The carriage of this duster is light in weight and sturdily built. It is possible to operate on the very roughest lands without damage of breaking. The tread's width is adjustable from 60 inches to 72 inches. The wheels are 48 inches in diameter and have 3 inch grooved tires. The standard equipment is for 2 horses and is therefore equipped with pole, eveners and neck yoke.

The Features Which Distinguish This Duster From Every Other Duster That Has Been Offered to the Trade Are:

(1) Its exceptional and accurate distribution.

(2) Its sturdy construction and simplicity of assembly.

(3) The utilization of all of the power generated.

(4) The accessibility of every part of each unit. There are exceptionally few parts necessary for its accurate performance.

(5) The adjustments for putting out extremely small or extremely large amounts of dust.

(6) ALL OF THE DUST MIXTURE OR OTHER MATERIAL PLACED IN THE HOPPER PASSES READILY AND COMPLETELY THROUGH THE MACHINE TO THE PLANT WITH ABSOLUTELY NO ACCUMULATION OR STOPPAGE IN ANY PART OF THE MECHANISM.

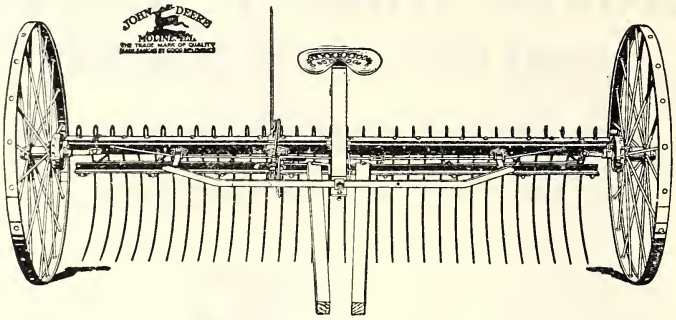
Price:

4 Row Duster.....**$235.00**

SEND FOR SPECIAL CATALOGUE

All Prices Subject to Change Without Notice

NEW JOHN DEERE SELF-DUMP SULKY RAKE



Gives Extra Years of Service

Wherever a sulky rake can be used, you can expect the best of service and satisfaction from the New John Deere. Not only is it built extra strong to withstand the hardest work in heavy hay and rough fields, but it is designed so that much of the wear that may develop after years of service can be taken up by simple, money-saving adjustments.

Handy Levers—Easy, Quick Dumping

The New John Deere is unusually easy to operate. Slight pressure with the right foot on the trip lever causes the dump rods to engage in wheel ratchets, resulting in quick, clean dumping. The horses do the actual work. When the rake dumps, the foot lever does not rise high enough to interfere with the driver's leg. The foot lever construction is designed so that presure of foot lever helps to force the teeth to their work quickly. For transporting, a simple hookup rod when set over lever connecting bar, or into lever base, locks up rake head.

Proper Balance an Important Point

The frame hinges and the axle supports are located so that the weight of the operator not only assists in dumping, but also forms a cushion action as the teeth return to working position, thus preventing excessive shock. The seat spring is placed so that the weight of the operator helps to properly balance the rake, relieving sudden shocks and doing away with neck weight on the horses.

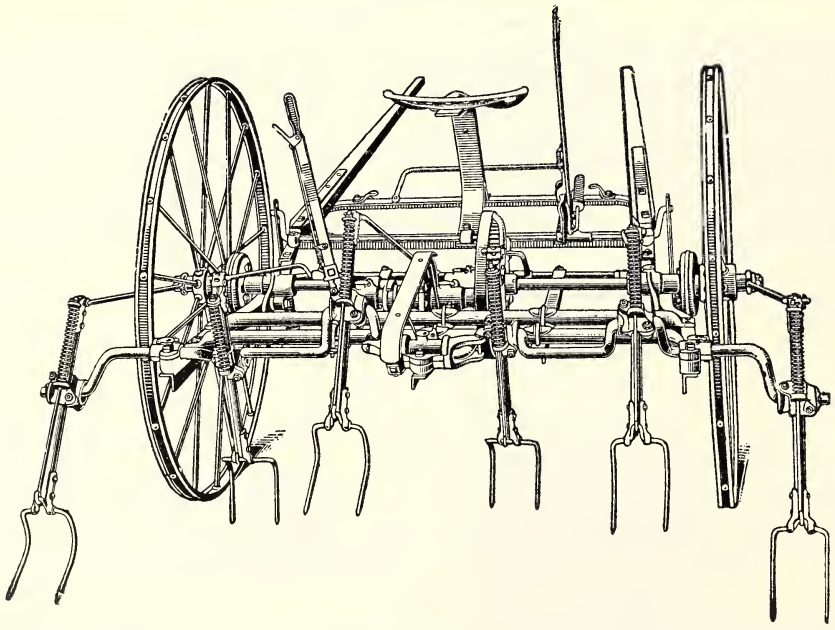
Sizes and Equipment

Made in 8-, 9-, 10-, 11- and 12-foot sizes. Relief spring regulator on 11- and 12-foot. This spring is recommended for 10-foot rake equipped with heavy teeth, or when a great amount of heavy work is being done. The 8- and 9-foot rakes are regularly equipped with combination singletree and pole extension; the 10-, 11- and 12-foot rakes with plain pole extension. The 11-foot corn stalk rake is regularly equipped with 27 one-half-inch single coil teeth with pencil point.

Prices on John Deere Rakes

8 ft.—24 Teeth.....**$42.00** 9 ft.—28 Teeth.....**$44.00** 10 ft.—32 Teeth.....**$46.00**

STANDARD TEDDER

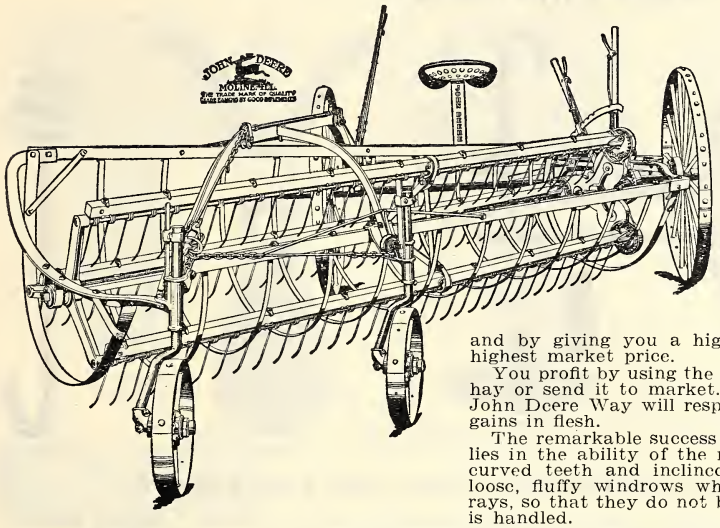


There is no haying machine a farmer can have that will return him as much profit, if judiciously used, as the Hay Tedder. This is particularly true in heavy hay crops and when the hay is cut early. There isn't any question but that hay, to be cured properly, must have light and air circulate through it. The leaves and blossoms cure much more quickly than the stems, and the hay that is on top cures quicker than that underneath. If the hay is left to dry in the swath the surface cures quicker. It has long been an established fact that hay curing on a cloudy day, with little dampness in the atmostphere, is of a much better quality than that cured when the sun is shining hot. The reason for this is that on a cloudy day the heat of the sun is eliminated to a large extent thus giving the hay a chance to cure more evenly. The Hay Tedder takes the place of the cloudy day

6-fork.....**$77.50** 8-fork.....**$80.00**

COMBINATION RAKE AND TEDDER

WHY THE JOHN DEERE WAY OF MAKING HAY IS MOST PROFITABLE



The John Deere Side-Delivery Rake with curved teeth and inclined frame is designed especially for making hay the John Deere Way, a method recognized by hay experts everywhere as the most profitable manner of curing ever devised.

The John Deere Way of Making Hay is profitable because:

1. It gives you a palatable, high-protein, leafy hay of good color and aroma, that will top the market.
2. It enables you to put up your hay, when the weather is favorable, in 24 hours or less.
3. It makes it possible for you to take your hay through the curing process without extra help.
4. It adds to your profits twofold—by cutting down the labor cost and by giving you a high-quality product that demands the highest market price.

You profit by using the John Deere Way, whether you feed your hay or send it to market. Stock fed high-protein hay made the John Deere Way will respond with increased milk flow and rapid gains in flesh.

The remarkable success of the John Deere Way of Making Hay lies in the ability of the rake, by virtue of its special features—curved teeth and inclined frame—to place the leaves inside of loose, fluffy windrows where they are protected from the sun's rays, so that they do not become brittle and shatter when the hay is handled.

PRICES—Combination Rake and Tedder

3 Wheels.....**$117.00** 4 Wheels.....**$122.00**

JOHN DEERE DOUBLE-CYLINDER HAY LOADER

WITH STIFF HITCH

The spring floated gathering cylinder can be adjusted so that it will not pick up anything the mower bar has passed over.

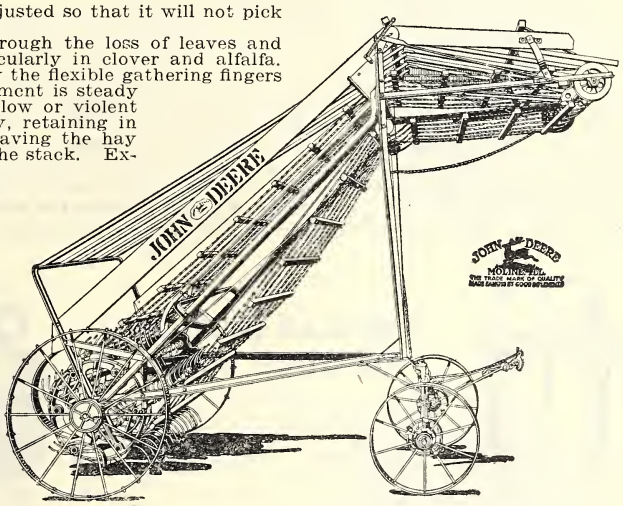
Gentle handling of the hay prevents waste through the loss of leaves and foliage, the principal source of food value, particularly in clover and alfalfa. From the time the hay is picked off the ground by the flexible gathering fingers until it is delivered on top of the load, the movement is steady and gentle, and the hay is protected against a blow or violent pressure. The result is unmatted, unbroken hay, retaining in the greatest degree the valuable parts, besides leaving the hay in excellent shape to be forked in the barn or on the stack. Experience has proved that the John Deere is the most satisfactory loader for handling ripe clover or alfalfa for seed. It is also unequaled for harvesting beans without shelling.

Great Capacity

The John Deere Double-Cylinder Loader successfully handles any quantity of hay—from the lightest swath to the heaviest windrow or large separate bunches of hay, bound or unbound sheaves or grain. The adjustments are not only ample, but entirely automatic. The special springs which control the opening at the lower end of the compressors give the proper pressure to both large and small quantities of hay as it is delivered to the carrier.

Light Draft

The John Deere Loader is light in draft because its running parts are slowly driven, its hay compression parts are automatically yielding, and its raking parts are floated and flexible, so that there can be no draft-increasing struggle with the hay or with the ground. This tends to relieve the horses of unnecessary burdens.



Adjustable carrier delivers hay closer to rack in starting load. Saves work in windy weather.

Works on Rough Ground

This cylinder loader is field-worthy on rough or uneven meadows, and far superior to all others under such unfavorable conditions. This is true because the gathering cylinder mount is flexible, cylinder is floated on springs, gathering fingers spring back and form a "sled-runner" contact on touching surface elevations, lifting the gathering cylinder softly over the obstructions. The fingers instantly straighten back to retain control of the hay and the cylinder is lowered for level work. These practical features enable the John Deere gathering cylinder to act automatically as its own gauge in following surface irrgularities, and it does this more perfectly than the loader which has a cylinder supported at some point ahead or behind the point being raked.

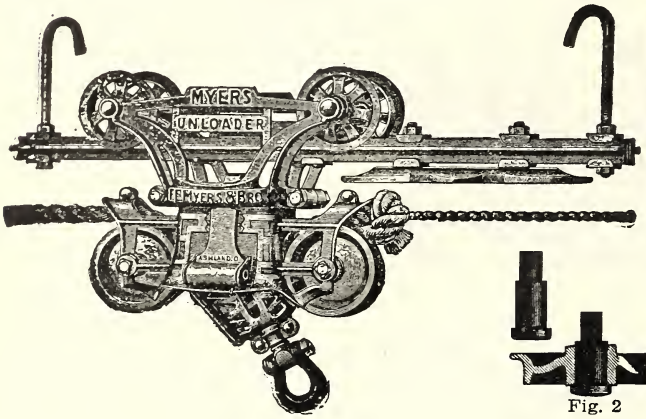
Durable

The John Deere Double-Cylinder Loader will last indefinitely with a minimum repair bill.
The working parts are slow-driven and provided with automatic relief from all unusual strains.
The steel frame is well braced; has hot-riveted corner braces. No bolts to lose out.
The carrier is made of selected yellow pine and is provided with a steel link chain. Extra strong and does not stretch.

PRICES

John Deere 6 ft. Double Cylinder Hay Loader with Fore-carriage.....**$115.00**
John Deere 8 ft. Bar Hay Loader, Roller Bearing Wheels..... **140.00**

THE MYERS HAY UNLOADER, TRACK, FORKS AND FIXTURES



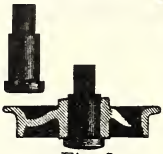


Fig. 2

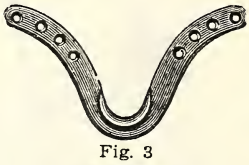


Fig. 3

Fig. 1

Fig. 4

Patent Double-Lock Hay Unloaders, Patent Steel Tracks, Slings, Forks, Pulleys, Etc.

A test of thirty years has demonstrated the superiority of the Myers Hay and Grain Tools. They are now universally known and acknowledged to be the best, most practical, simplest in construction and that they meet al the requirements.

A comparison of our carriers with others will show many points of superiority in our favor These special features and advantages are covered by letters patent owned and controlled by us.

It is of the greatest importance that implements of this class, which are subjected to severe usage during the hurry of the haying season, should be thoroughly well built and constructed of first-class material throughout. The best malleable iron is used in the construction of our goods.

We give the above view of Myers Hay Unloader to be used on Myers Double-Angle Steel Track. This is the latest and best hay carrier, and it embodies all the features of the Straight Reversible and Swivel Reversible Carrier, and has many advantages over any other machine on the market. It is fitted with the Myers reliable double lock, which engages the fork pulley on each side, thus insuring a perfect locking device. One of the most important features of this carrier is the wide-open mouth, which permits the fork pulley to enter when swinging at any angle. This feature can be readily understood by referring to the illustrations above, and noting the shape of fork pulleys Fig. 1). This construction insures a satisfactory working carrier under all conditions. The track wheels (Fig. 2) have turned steel axles, and weight is carried in center of wheel; the rope sheaves are fitted with wide hub and have longer bearings than any other make of carrier. For strength, simplicity, neatness of design and up-to-date features it is without a peer. We also offer the **Myers Unloader for Wood Track.** The Wood Track Unloader possesses all the good features of the Steel Track Unloader. Price **$10.00.**

Fig. 5

REGULAR DOUBLE-HARPOON FORK

Fig. 5

The best known Fork.

25 in. **$2.50.** 31 in. **$2.75**

MYERS LOCK-LEVER FORK

(Fig. 6)

Has 50 per cent more capacity than the regular Double Harpoon Fork on account of the cross-bar being nearer the top. Operated with one lever. Price, **$6.50.**

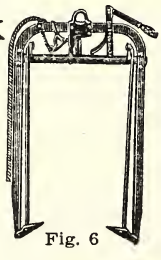


Fig. 6

PULLEYS, HOOKS, ETC.

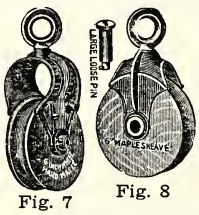
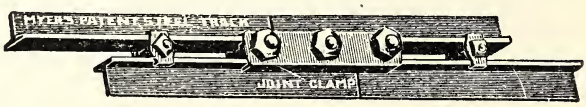


Fig. 7 Fig. 8

Malleable Rafter Brackets (Fig. 3), each	$.06
Steel Hooks (Fig. 4), each	.18
Floor Hook, ¾-inch, each	.18
Plain Maple Sheave Pulleys (Fig. 8), each	.70
Knot-Passing Maple Sheave Pulleys (Fig. 7), each	.70
Rafter Nails, per lb	.10

Manila Rope, either ¾ or ⅝-inch diameter, at market prices, usually about 36c per lb.; about 5 feet to the pound.

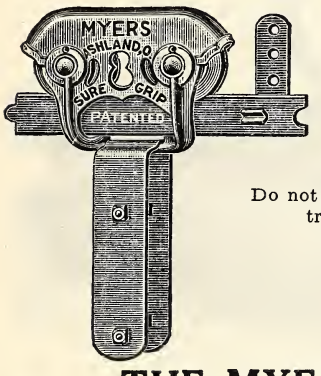
MYERS PATENT STEEL TRACK



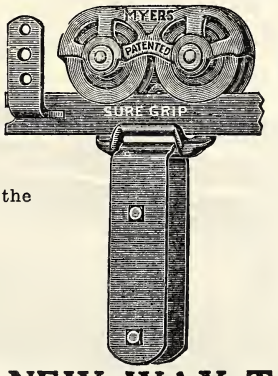
The style of this Track is here illustrated. It is made of two T carbon rails, very hard and stiff. Note the manner of clamping it together so that the two joints do not come opposite each other. A wrench only is needed to put this Track together. Price, per foot, **25c**

All Prices Subject to Change Without Notice

MYERS SURE GRIP PLAIN TANDEM FLEXIBLE DOOR HANGERS



Do not jump the track.

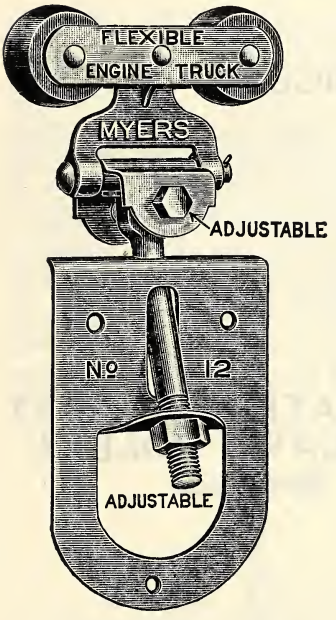


These cuts show the front and back view of the Sure Grip Plain Tandem Door Hangers. Note the heavy malleable rib supporting the main frame, which adds great strength and enables the hanger to carry any weight door. Track is made of high carbon steel in 4, 6, 8 and 10 foot lengths.

Sure Grip Tandem Hangers, per pair, complete with bolts .... **$1.60** pair

Track ..... **.10** per ft.

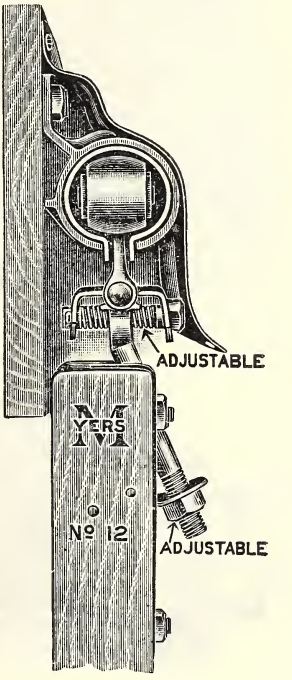
THE MYERS NEW WAY TANDEM ADJUSTABLE DOOR HANGERS



The New Way tubular track is mounted with brackets. We call special attention to the two flanges shown on the underside of the track, which are a part of the track itself, turned down forming a girder or truss, which stiffens the track, and adds greatly to its strength and carrying capacity.

The trolley rollers are of solid steel roller bearings.

The hanger has two adjustments vertical and lateral, so that with any ordinary wrench the door can be adjusted to the building.



Hangers per pair with bolts..... **$2.50** pair

Tubular Track, 4, 6 and 8 foot lengths.. **.26** foot

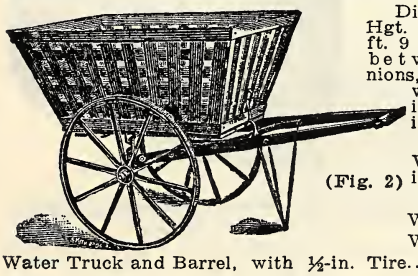
Intermediate Brackets..... **.20** each

End Brackets..... **.20** each

WATER TRUCKS and COMBINATIONS

WITH STEEL WHEELS

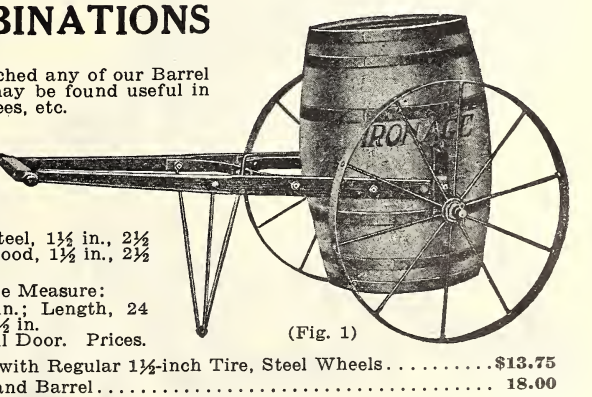
Fig. 1 represents our Barrel Cart, to which can be attached any of our Barrel Spray Pumps. This is a convenient combination, and may be found useful in various ways, such as watering gardens, spraying fruit trees, etc.
Fig. 2 shows Truck with Leaf Rack Attachment.
Fig. 3 shows Truck and Box, with Barrel detached.



(Fig. 2)

Dimensions: Hgt. of Wheels, 2 ft. 9 in.; distance between Trunnions, 2 ft. 2½ in.; width Tire, Steel, 1½ in., 2½ in., 3½ in.; Wood, 1½ in., 2½ in., 4 in.

Box Inside Measure: Width, 22½ in.; Length, 24 in.; Height, 8½ in. Box has Tall Door. Prices.



(Fig. 1)

Water Truck, with Regular 1½-inch Tire, Steel Wheels..... **$13.75**
Water Truck and Barrel..... **18.00**
Water Truck and Barrel, with ½-in. Tire..... **$18.00**
Water Truck, Barrel and Box..... **23.75**
Sprinkling Attachment..... **6.00**
Leaf Rack..... **10.50**

All Prices Subject to Change Without Notice

CHAMPION STEEL FIELD ROLLERS

In offering our Champion Steel Field Roller we do so believing it to be the best roller of its kind on the market. We call particular attention to the patent pressed steel head, which keeps the earth from clogging in the shells as in an open-head roller; also to the removable chilled bushing, which is bolted fast to the head, and which is a valuable feature, as they can be readily replaced by any one at a trifling expense and saves the trouble and cost of sending the roller to the machine shop when the bearings are worn out. Diameter is 26 inches. Wood frame.

No. 105—Size, 8 feet, 2 sections; weight 600 lbs. Price, **$42.50.**
No. 106—Size, 8 feet, 3 sections; weight 630 lbs. Price, **$45.00.**

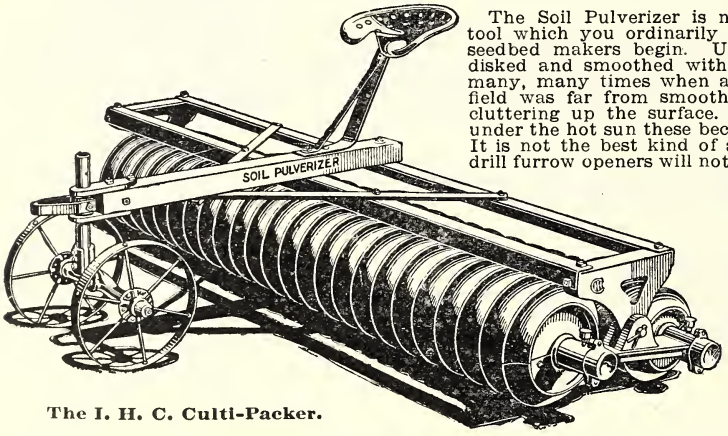
Prices include double trees and neck yoke.

BUCH'S No. 105½ LAND ROLLER

The description of No. 105½ is identically the same as Roller No. 105 excepting that it has a steel frame instead of wood frame.

This roller has our angle steel frame. which makes it an all-steel roller, except the tongue. In this respect it may be said that it is a trifle more durable than the wood frame, as naturally the steel will outlast the wood. There is little choice between them. It is an excellent implement in every respect. Rollers Nos. 102½ and 107½ are of the same construction. Diameters, rolling surface and prices will be furnished on application. Material and workmanship are of the highest grade. With proper care it ought to last a lifetime, as there is nothing to wear out but the wood journals, and these can be replaced at a trifling cost. 8-foot, 2-section, **$42.50**; 8-foot, 3-section, **$45.00.**

THE BRILLION PULVERIZER FOR BIGGER CROPS



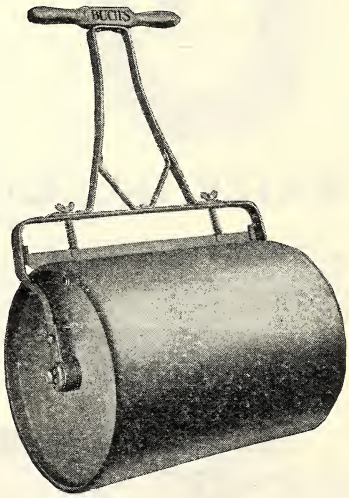
The I. H. C. Culti-Packer.

The Soil Pulverizer is not recommended to replace any tillage tool which you ordinarily use. It simply finishes what the other seedbed makers begin. Under the old way, a field was plowed, disked and smoothed with a peg-tooth harrow—but you know of many, many times when after those operations were complete the field was far from smooth. There were great lumps of dirt still cluttering up the surface. Hard clods were scattered about, and under the hot sun these became solid and utterly devoid of moisture. It is not the best kind of a seedbed to plant grain in, because the drill furrow openers will not penetrate evenly—some seed is scattered about on the surface to be eaten by the birds and the resulting stand is considerably under normal.

Made in all sizes. 98 inches long, front 15-inch diameter, rear 12-inch diameter.

Send for Special Catalog and Price.

WATER BALLAST LAWN ROLLER

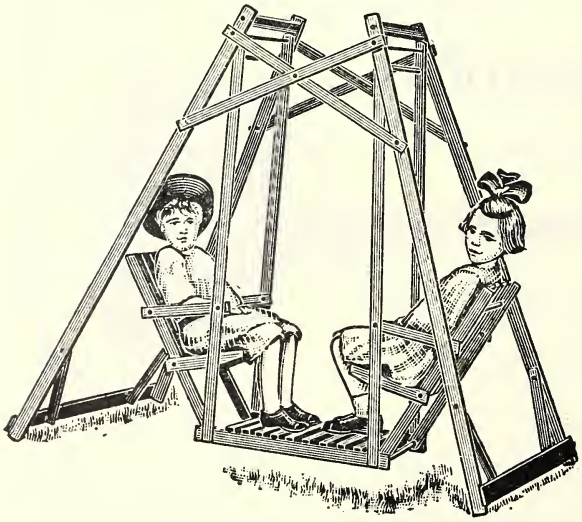


filled with water to any desired weight. It can thus be regulated to suit soft turf, firm lawns or driveway, tennis court, etc. It can be emptied for storing away, making it light and easy to handle. The drum is high carbon steel with all seams electric welded. Edges are rounded back to prevent cutting of lawns, courts, etc.

Prices Water Ballast Rollers

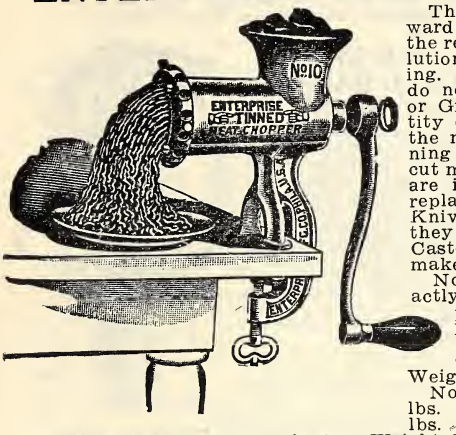
No	Dia. in.	Length in.	Weight Empty	Weight Filled with Water	Weight Filled with Sand	Price List
601	14	24	60	250	400	**$17.00**
602	18	24	75	330	475	**20.00**
603	24	24	100	440	630	**23.00**
604	24	32	115	590	850	**26.00**

LAWN SWING



Made for durability and wear. A far superior article to the ones bought in department stores. Price of 2-passenger Swing, **$8.00.** 4-passenger, **$11.00.**

"ENTERPRISE" MEAT AND FOOD CHOPPERS, (Tinned)



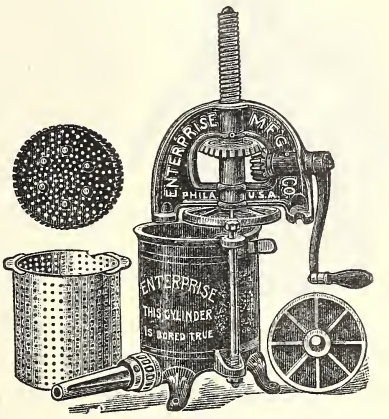
The meat is fed into the Hopper, and by the Feed Screw carried forward and forced into the small holes of the Plate, where it is cut off by the revolving Knife, which makes four cuts for each hole, with every revolution of the Crank. The pieces thus cut are ejected by the meat following. All our Choppers Cut the meat as with a pair of scissors, and do not grind or tear it. It is impossible for any Strings, Sinews or Gristle to pass through without being chopped. The small quantity of uncut meat remaining in the machine can be cut by running through some of the already cut meat a second time. All parts are interchangeable and can be replaced at small cost. The Knives and Plates being Steel, they are vastly superior to the Cast-iron cutting parts of other makes of Chopper.

No. 5 Family size. Chops exactly as shown. Chops 1½ lbs. per minute. Weight 4¾ lbs. **Price $3.25.**

No. 10 Restaurant size. Chops 3 lbs. per minute. Weight 8 ¾ lbs. **Price $5.50.**

No. 20 Butcher size. Chops 4 lbs. per mlinute Weight 16 ½ lbs. **Price $11.00.**

No. 12 Chops 3 lbs. per minute. Weight 9 lbs. **Price $5.00.**
No. 22 Chops 4 lbs per minute. Weight 14 lbs. **Price $8.75.**
No. 32 Chops 5 lbs. per minute. Weight 22 lbs. **Price $10.50.**



"Enterprise" Sausage, Lard & Fruit Press

NEW PATENTED CORRUGATED SPOUT

Points of Merit

The Iron Cylinder is bored True. The Tin Cylinder has Lips to enable the Operator to remove the Hot Cracklings with little or no inconvenience. No Hot Iron Cylinder to handle when pressing Lard. The Patent Latch prevents breakage of Plates.

The New Patented Corrugated Spout furnished with each Machine prevents air entering the Casing, thus assuring the preservation of Sausage. This spout has a ¾-in. outlet. Other sizes, which are ¾-in., ½ in. and ⅝-in., can also be supplied at small cost.

Japanned

No. 5—2-qt., Rack.....**$8.00** No. 15—2-qt., Screw.....**$9.00** No. 25—4-qt., Screw.....**$10.50**
No. 31—6-qt., Screw.....**$11.50** No. 35—8-qt., Screw.....**$12.50**

SYRACUSE DRAG SCRAPER

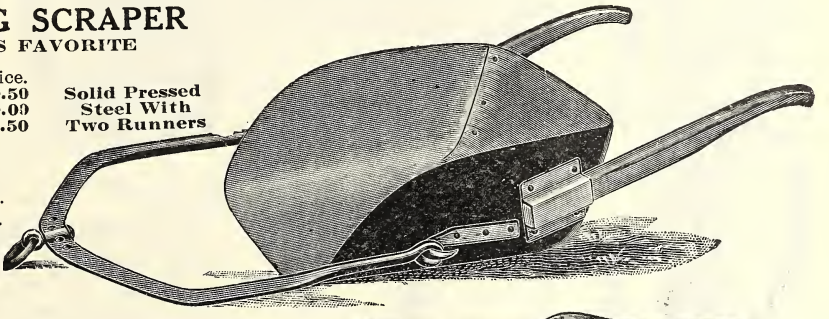
THE CONTRACTOR'S FAVORITE

Prices:

No.	Capacity.	Weight.	Price.	
1	7 cu. ft.	105 lbs.	**$10.50**	**Solid Pressed Steel With Two Runners**
2	5 cu. ft.	95 lbs.	**10.00**	
3	3½ cu. ft.	85 lbs.	**9.50**	

Measurements:

No.	Length.	Width.	Depth.
1	33 in.	32 in.	11½ in.
2	31 in.	28 in.	10½ in
3	30 in.	27½ in.	9 in.



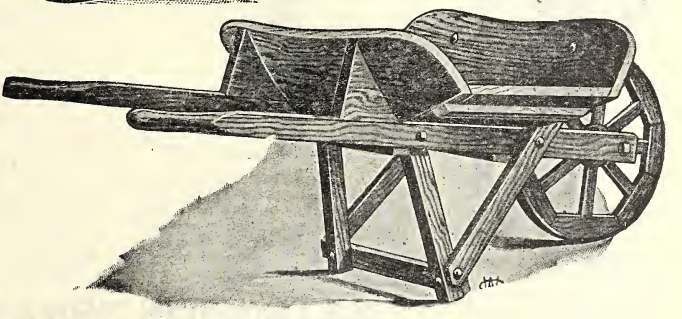
BENT TRAY WHEELBARROW

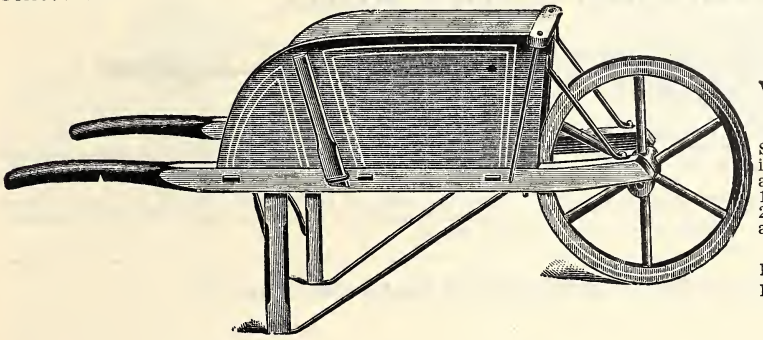
This is a "full bolted" Barrow and is set up for shipment.

Full-sized Bent Tray, well planed, cleated, braced and bolted. Legs and cross pieces gained, leg braces extending beyond handles, bracing tray, and bolted to it.

Diameter of Wheel, 17 inches; Tire 3-16x1⅛ inches; Spokes, ⅞x1 inch; ½-inch Axle Bolt.

Price.....**$5.00**





BUCH'S Nos. 2 AND 3 WHEELBARROW

A durable, neat Garden Barrow. Size of body, 28 inches long, 20 inches wide in front, 24 inches wide at back; Sideboards, 27 inches long, 12 inches high; Handles, 5 feet long, 2x1¾ inches; Wheel, 20 inches diameter, 6 Spokes.

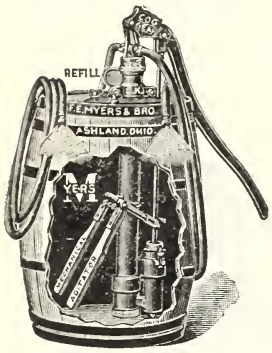
Prices:

No. 2.....**$7.50**
No. 3..... **7.00**

MYERS STANDARD BARREL SPRAY PUMPS, ETC.

For Hot, Cold or any Kind of Mixture—Has Mechanical Agitator, Solid Brass Ram Plunger, Ground Bevel Valve and Seat

MYERS O. K. COG GEAR SPRAY PUMP



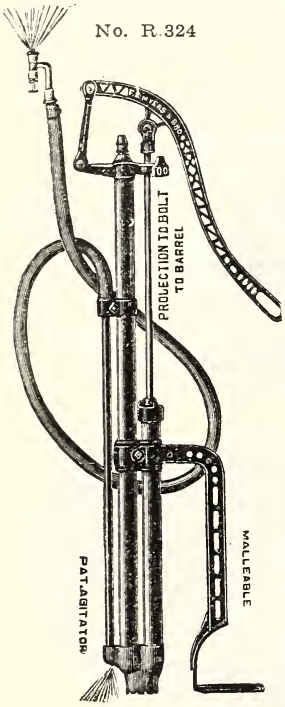
The new Myers O. K. Spray Pump has a special clamping device that can be adjusted to any barrel, regardless of the height or width. The cylinder is what is known as a ram plunger, made of solid brass tube with a closed end, which passes through a circular hemp packing, which adapts it for pumping hot, cold or any kind of mixture. The packing gland has a simple and positive adjustment, by which all wear can be readily taken up. The valves can be easily taken out and repaired. The air chamber is made of 2 ¼-inch steel tube, the handle is wrought steel, with adjustable stroke, and the pump is fitted for two strings of discharge hose. Price of Pump, with 1 lead of 15-foot hose, 8-foot pipe extension and Vermorel or Bordeaux nozzle, including barrel, **$32.50.**

If Barrel not wanted **$4.00 Less.**

LEVER BUCKET SPRAY PUMPS

No. R324 represents the Myers Lever Bucket Spray Pump, made of brass and fitted with brass valves and patented agitator. The cylinder is 1 inch in diameter with solid plunger. The air chamber is 50 per cent larger than the ordinary bucket spray pump, has malleable iron foot rest and malleable lever. Price, plain **$6.50.** Add for 8 ft. extension rod **80c.**

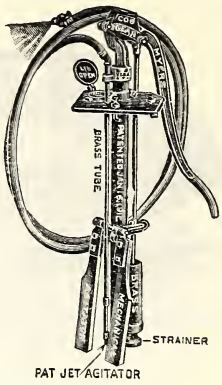
No. R.324



No. 325

No. 325, Brass Spray Pump with agitator, hose and combination fine, coarse and solid stream nozzle, with malleable foot rest. Price, plain **$4.25.** Add for 8 ft. extension rod, **75c.**

No. R-318-B MYERS IMPROVED BARREL SPRAY PUMP



The entire Pump sets in the barrel containing the liquid and is bolted fast to the staves at the upper end. The working parts being all submerged, the possibility of losing priming is done away with. Valves and seats are ground brass, brass cylinder and discharging pipe, patent expansive bucket, large 30-inch air chamber Vermorel or Bordeaux nozzle, mechanical agitator and pipe extension. Price, including barrel, **$21.00.**

If mechanical agitator is not wanted, deduct 75c. If pipe extension is not wanted deduct $1.75.

If Barrel not wanted **$4.00 Less.**

THE MYERS COMPRESSED AIR OIL SPRAYER

Fig. 1862 illustrates the Myers Pneumatic Sprayer as built to meet the demands for this style of Spray Pump. It is made of heavy galvanized iron with 1¾ in. brass tube cylinder attached to the can by means of a heavy brass screw nut. The small diameter cylinder operates easier than larger sizes. The nut is operated by lugs on the lower part of the handle, which engage in opening at the top of the nut. By means of these lugs and handle the nut can be screwed tightly to the top of the tank, and at the same time lock the plunger in opposition which also permits of the tank being carried by the handle when desired. In the Myers construction we have done away with the large butterfly nuts as used on others, which are very objectionable owing to the fact that it is not only difficult to screw the cap perfectly tight but also very injurious to the hands in pumping.

The Handle is D-shaped in form, and large enough to be operated by any one with perfect comfort.

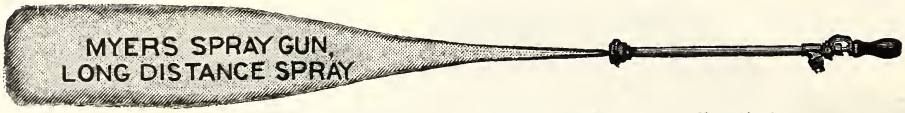
The Nozzle is one of the special features of this Sprayer By means of the small lever the spray can be adjusted from a broad fine spray, covering the ordinary distance into a complete long distance spray throwing water 25 feet, by means of which the top of any small fruit tree can be reached. This style nozzle is a patented article used only on Myers Pneumatic Sprayers. Fill ¾ full of water at starting—for best results.

The Valve, a very important part of a pump of this kind, is simple and effective. It is made of a pliable rubber disk supported by metal plate held in position by a brass coil spring and brass stud, on which it operates. Can be removed instantly.

PRICE LIST, Represented by Fig. 1862

No. 296, Myers Pneumatic Sprayer complete with long distance nozzle as shown in Fig. 1862. Galvanized. Price..... **$5.50**
No. 296B, Same as No. 296, except with Brass Tank. Price..... **$8.75**
Extension for Compressed Air Sprayer with nozzle **$1.10**
With lever nozzle..... **$1.40**

EXTENSION SPRAY RODS



The idea to enable one man to do the spraying, thus saving the expense of two extra men as is the case with the ordinary spray rig using two lines of hose with bamboo extensions.

By a one-third turn of the handle the spray can be adjusted from a long distance spray reaching the top of the tree to an extremely broad spray sufficient to cover the entire tree or shut off entirely.

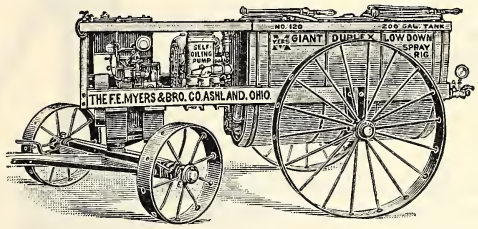
It is furnished with four separate spray discs designed to deliver the entire capacity of the pump, either 4, 6, 8 or 10 gallons per minute.

One-third turn of the handle adjusts the spray from a wide open nozzle to a complete shut-off of the mixture. **Price, $6.00.**

Spray Your "Wisdom" Tomato Plants Early—See Page 23

THE MYERS SELF-OILING POWER SPRAY RIG

The Automatic Pressure Governor insures safety. Secures uniform pressure and eliminates unnecessary wear. Relief valves not required.



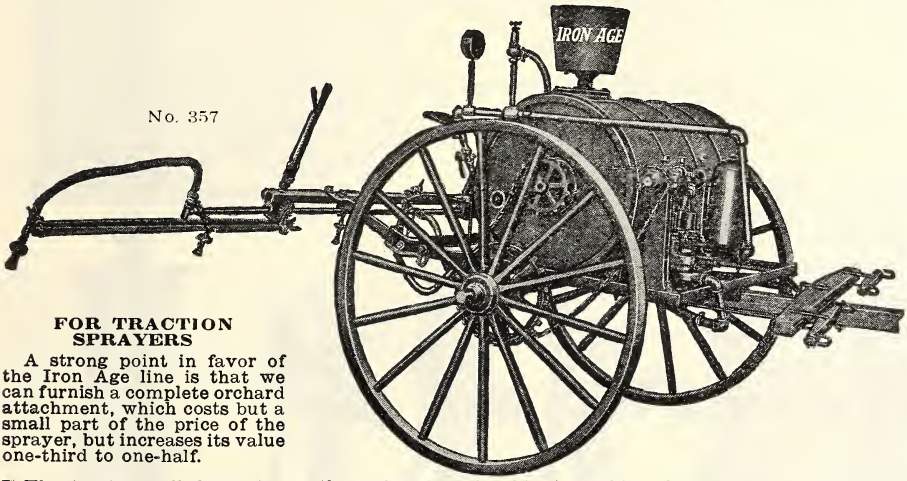
The Myers Self-Oiling Power Spray Rigs are fitted with cypress tanks from 100 gallons to 300 gallons capacity, Rotary Agitator, and ALL STEEL SHORT TURN TRUCK. It can be either belt driven, chain driven or direct geared. Pressure from 250 pounds to 300 pounds recommended. The rear axle is made of 1⅝-inch round steel with drop center, circulating under side of the Spray Tank, and is attached to the main sils by heavy ribbed cast brackets, making the most rigid form of construction. The Front Axle is made of 4-inch channels trussed together and thoroughly braced.

The frame is made of 4-inch channel steel with heavy steel cross members. Hot riveted.

The Pump is the Myers Self-Oiling with Myers Pressure Regulator and Unloading Valve. This is an ideal Power Spray Rig which we highly recommend for those wishing a Power Spray.

Prices furnished upon application.

SIX-ROW 100-GALLON TRACTION SPRAYERS



No. 357

FOR TRACTION SPRAYERS

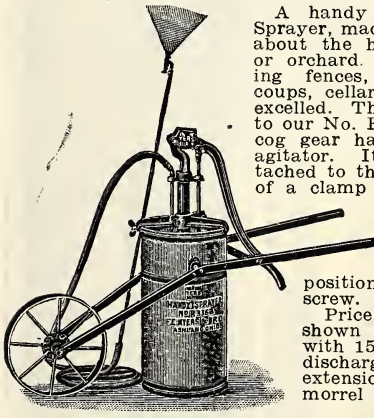
A strong point in favor of the Iron Age line is that we can furnish a complete orchard attachment, which costs but a small part of the price of the sprayer, but increases its value one-third to one-half.

No. 357—Here is a machine for the farmer who wishes to spray at the highest pressure obtainable from traction and to do it rapidly. The "Iron Age" Triplex Pump will deliver spray under a pressure of about 175 lbs. when operated from the wheels by traction. Just as the six-cylinder automobile runs more smoothly than the four, this pump will run somewhat more smoothly than the Duplex, as each plunger connects with the crank shaft at a different angle. This reserve power makes it a long-lasting pump.

Large acreages of potatoes demand quick work, and a machine that covers six rows at high pressure is worth the difference in cost. It cuts the team travel one-third and covers the ground more than half again as fast as with the four-row sprayer on account of time saved in turning—a vital matter in these days of scarce labor.

The trucker will find still another advantage in this six-row machine. Where he grows two crops together, such as tomatoes and peas, he can stop off every other nozzle so as to cover only one of the crops. **Price, $215.00.**

MYERS HANDY PORTABLE SPRAYER



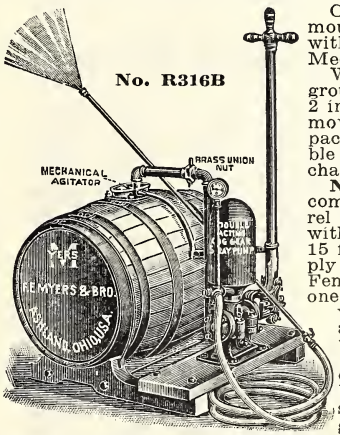
No. R336B

A handy and convenient Sprayer, made for general use about the home, greenhouse or orchard. For whitewashing fences, barns, chicken coups, cellars, etc., it is unexcelled. The pump is similar to our No. R318B fitted with cog gear handle and dasher agitator. It is securely attached to the tank by means of a clamp connected direct to the channel iron that surrounds the top of the tank held in position by one thumb screw.

Price complete as shown in illustration, with 15 feet ½-in. 5-ply discharge hose, 8 foot extension rod and vermorrel nozzle

Price $26.00

MYERS COG-GEAR DOUBLE ACTING SPRAY PUMP



No. R316B

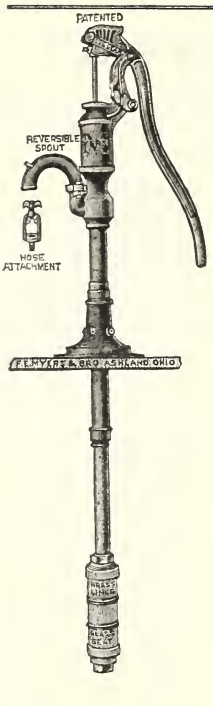
Complete outfit, mounted on platform with 50 gallon barrel and Mechanical Agitator.

With brass valves and ground bevel brass seats, 2 inch seamless brass removable cylinder, hemp packed plunger and double lever shut-off discharge.

No. R316B, Pump complete, 50 gallon barrel mounted as shown, with pressure gauge, one 15 foot lead of ⅜ inch 7-ply discharge hose, one Fembro Fig. 1290 nozzle, one 8 foot pipe extension with lever shut off and mechanical agitator. **Price $54.00.**

No. R316C, Pump complete, 50 gallon barrel mounted as shown, with pressure gauge, two 15 foot leads of ⅜ inch 7-ply discharge hose, two Fembro Fig. 1290 nozzles, two 8 foot pipe extensions with lever shut-offs and mechanical agitator. **Price $60.00.**

Plant The "Wisdom" Tomato (See Page 23)



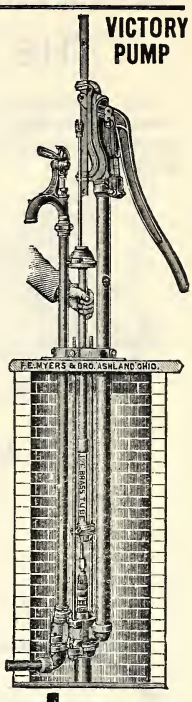
MYERS HAND PUMPS

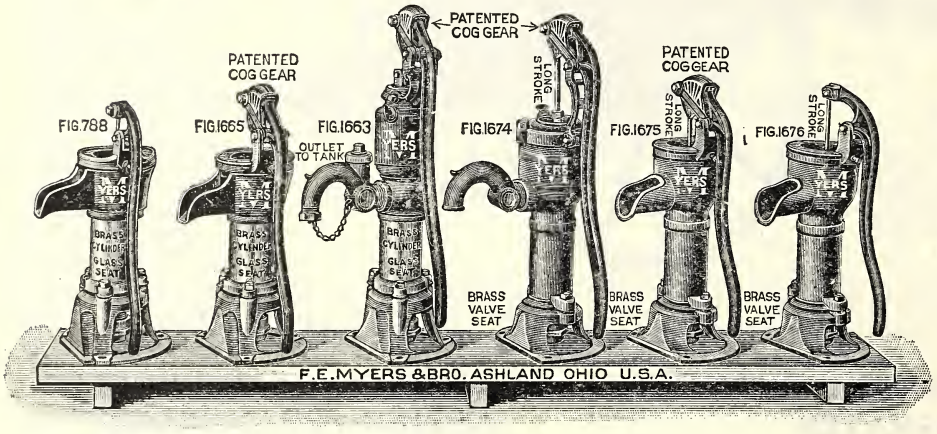
Myers Victory, Power Force Head, underground Three Way pump, with 6, 8 and 10 inch stroke.

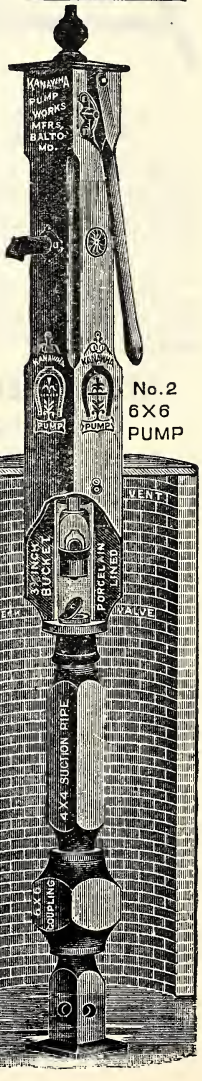
Built very Strong and Durable. Plungers can be withdrawn through base of pump and leathers renewed without disturbing pipe line or going below platform. Adapted for any depth wells.

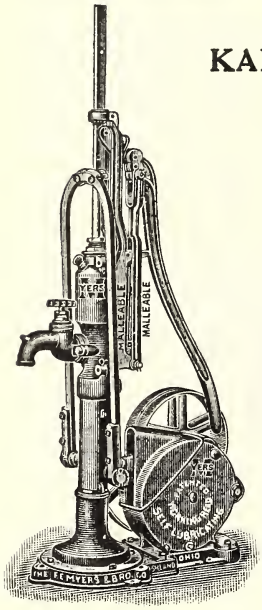
Myers Single Acting Force and Lift Cog Gear Pumps. The advantage of this style handle is that it allows the piston to move in a direct line without swaying from side to side, as is necessary with the ordinary handle. The advantage of the **cog** leverage is that it reduces the power at the handle 33⅓%, and makes pumping easy in deep wells.

Complete line of House and Pitcher pumps, with brass and iron cylinders.









KANAWHA PUMPS FITTED FOR WELLS

Depth of Well.	No. 2, 6x6 House Pump.	No. 5. 7x7 Farm Pump.	No. 7, 8x8 Stock Pump.
8 feet	$13.20	$15.80	$22.80
9 feet	13.60	16.20	23.20
10 feet	14.00	16.60	23.60
11 feet	14.40	17.00	24.00
12 feet	14.80	17.40	24.40
13 feet	15.20	17.80	24.80
14 feet	15.60	18.20	25.20
15 feet	16.00	18.60	25.60
16 feet	16.40	19.00	26.00
17 feet	16.80	19.40	26.40
18 feet	17.20	19.80	26.80
19 feet	17.60	20.20	27.20
20 feet	18.00	20.60	27.60
21 feet	19.20	22.00	30.00
22 feet	19.60	22.40	30.40
23 feet	20.00	22.80	30.80
24 feet	20.40	23.20	31.20
25 feet	20.80	23.60	31.60
26 feet	22.00	25.00	34.00
27 feet	22.40	25.40	34.40
28 feet	22.80	25.80	34.80
29 feet	24.80	28.20	37.20
30 feet	25.20	28.60	37.60

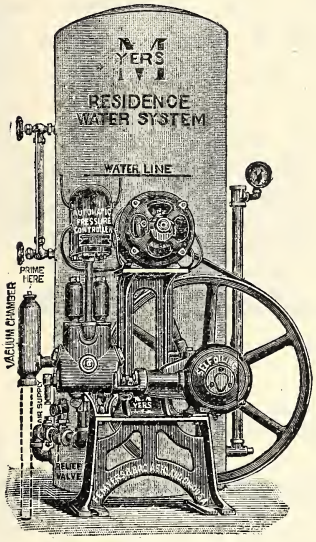
Depth of Well.	No. 4, 7x7 Pump Head.	No. 6, 6x6 Pump Head.
31 feet	$32.50	$28.50
32 feet	32.90	28.90
33 feet	33.30	29.30
34 feet	36.10	32.10
35 feet	36.50	32.50
36 feet	36.90	32.90
37 feet	39.70	35.70
38 feet	40.10	36.10
39 feet	40.50	36.50
40 feet	40.90	36.90
41 feet	44.90	40.90
42 feet	45.30	41.30
43 feet	45.70	41.70
44 feet	46.10	42.10
45 feet	48.90	44.90
46 feet	49.30	45.30
47 feet	49.70	45.70
48 feet	51.30	47.30
49 feet	51.70	47.70
50 feet	52.10	48.10

Unlined pumps are not recommended.

For pumps fitted with Closed Bracket Handles, add $2.50.

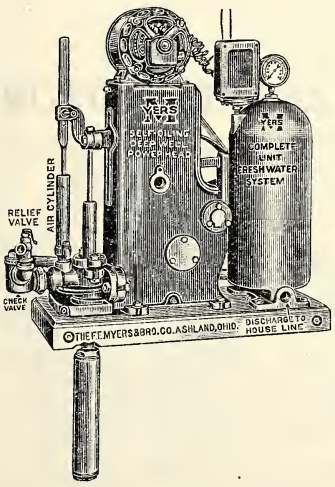
These Prices Apply to Wood Pumps.

THE MYERS AUTOMATIC, SELF OILING WATER SYSTEMS

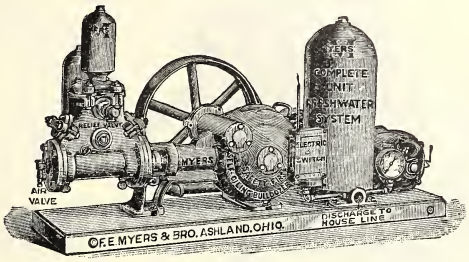


No. 600AT. For use in Cisterns or Shallow Wells up to 22 feet in Depth. Designed for operation from any kind of City Current or from Farm Lighting and Power Systems. Operation is automatically controlled by use of the Automatic Controller. Cost of operation very small. All working parts are automatically lubricated by oil splash from the crank case, which eliminates frequent useage of a dirty oil can. Floor space 27" x 29" x 51" high.

Galvanized Tank. Capacity 180 gal. per hour.



No. 1655AM. Myers Deep Well Fresh Water System. Operation same as No. 622AM System, except for wells 24 feet or more in depth. Capacity depends on size of cylinder used, from 300 to 450 gallons per hour. Floor space, length 46 in., width 16 in., height 24 in.



No. 622AM. Myers Direct Water System. Fresh Water Direct from the Well. No Storage Tank Needed.

Why use a Toy Outfit and Stale Water when you can have fresh water direct from the well or cistern.

Complete unit, the only thing necessary in the installation is to connect the discharge to the house line. The ordinary leakage of a defective faucet does not start the pump on a Myers System. Capacity 450 gallons per hour. Floor space: Width 15 in., length 50 in. height 25 in. For wells up to 24 feet in depth.

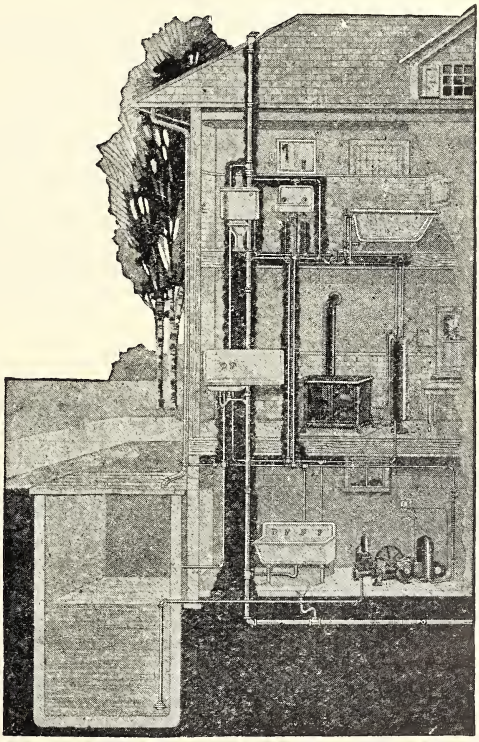


Illustration shows an interior view of any home with a complete Water System.

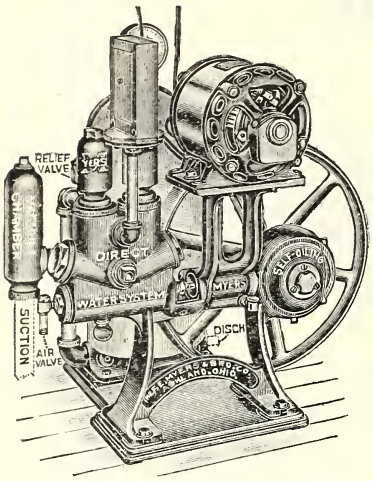
The water supply is furnished in this installation by the **Myers Direct Water System (No Storage Tank Needed).** Why not equip your Suburban and Farm Home with a supply of **Fresh Running Water,** and save the drudgery of carrying water.

We carry a complete line of **Water Systems, Hand and Power Pumps** for all purposes.

Tell us what your requirements for water are, and allow us to quote you on the proper **Water System or Pump** for your requirements. Special pump catalogue furnished on request.

Prices Subject to Change Without Notice

THE MYERS JUNIOR DIRECT WATER SYSTEM



Complete Unit. Self Oiling. No Storage Tanks. Fresh Water Direct from the Well. Pumps direct to the Faucets. Two sizes, 200 gallon per hour and 300 gallon per hour.

Why use stale water when you can have fresh water direct from the well? Has sufficient capacity to supply a Gem Nozzle for lawn sprinkling. Motor dirven—automatically controlled—economical—efficient.

Designed for operation from any kind of city current or from Farm Lighting and Power Systems.

FLOOR SPACE—Width 22 inches. Length 27 inches. Height 27 inches.

For shallow wells up to 24 feet in depth.

The ordinary leakage of a defective faucet does not start the pump on a **Myers Direct Water System** as there is a gallon of water in reserve to take care of minor defects in the plumbing.

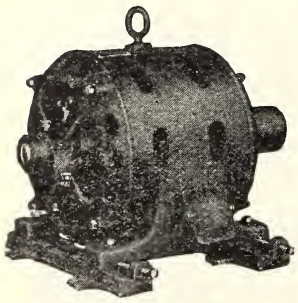
The **Meyers Junior Direct Water System**—a complete unit. The only thing necessary for installation is to connect the discharge to the house line.

The outfit is composed of a Self Oiling Pump mounted complete with a REPULSION-INDUCTION TYPE MOTOR, Pressure Gage and Electric Switch. The air chamber on the pipe line is of sufficient size to properly cushion the stream and at the same time not to any unnecessary surplus water, as is the case of Storage Tanks.

It is never necessary to draw more than 1 gallon of water until the pump starts, after which it pumps fresh water direct from the supply to the faucets. It avoids the expense and space required by a large storage tank and all the disadvantages connected therewith.

OPERATION—The **Myers Direct Water System** is of sufficient capacity to pump directly against faucets supplying an ordinary residence. The opening of any faucet starts the pump. The expense of the current in operating an outfit of this class is no greater than is required for operating pumps of one-half the capacity when connected with large storage tanks as they are obliged to work under pressure of from 40 to 50 pounds, whereas the **Myers Direct Water System** works under pressure of 10 to 30 pounds only.

Prices on Application.



CENTURY ELECTRIC MOTORS

Since the distribution of electric current has become general through the suburban and farming districts, many people are now operating their water systems and various machinery with electricity.

They find this means economical and very convenient.

POLYPHASE

TYPE "SC" SQUIRREL CAGE INDUCTION MOTORS

Type "SC" motor squirrel cage construction consists of high conductivity copper bars brazed into formed U shape cross section rolled copper end rings, with a material that will not melt under the most severe operating conditions.

The pyramidal style of field winding is employed (2 pole excepted), which gives generally better characteristics and ventilation. The temperature rise is well withing 40o Centigrade under continuous full load operation.

The bearings are machined from phosphor bronze castings, with machine cut figure 8 oil grooves, and provided with brass oil rings.

The general design of frame, end brachets, etc., is such as to permit of free circulation of air, at the same time protecting the winding from contact with foreign bodies. Definite provision is made for excluding dust from the oil wells.

Starting current in no case exceeds the N. E. L. A. and Electric Power Club starting suggestion.

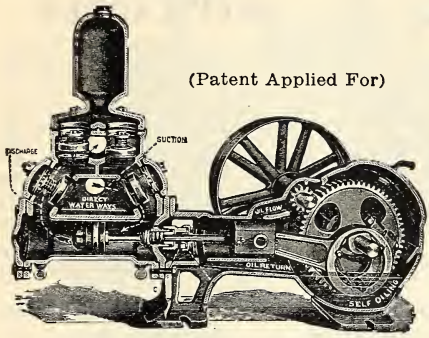
Sheet Steel baked Enamel finish Ventilating Fawn.

Type "SC" Squirrel Cage Polyphase Motors are built for all standard speeds and voltages, under the same rigid specifications covering workmanship, test, performance, etc., as are used in the production of other **Century** apparatus.

Write for Prices **Motor Prices on Application**

N. B.—Specify current used. If alternating current give phase frequency and voltage. If direct current give voltage.

MYERS SELF-OILING BULLDOZER POWER PUMP



(Patent Applied For)

Self-Oiling. Fully Enclosed. Back Geared 5 to 1. Renewable Bearings "A." 100-Pound Pressure.

Floor Space:

2½x3 Pump	14x31 inches	4x5 Pump	24x46½ inches
3x4 Pump	18x37 inches	5x5 Pump	24x48 inches

For General Service.

Capacity 500 Gallons at 70 R. P. M.

No. 612—Myers Self-Oiling Bulldozer Power Pump with vacuum chamber, 2½x3 inches. Brass-lined cylinder, 12x2 inches. Tight and loose pulleys, 1½ inches. Brass piston rod, suction and discharge, 1¼ inches. Price.....**$50.00**

Capacity 1,000 Gallons Per Hour at 70 R. P. M.

No. 613—Myers Self-Oiling Bulldozer Power Pump with vacuum chamber, 3x4 inches. Brass-lined cylinder, 14x2½ inches. Tight and loose pulleys, ⅝ inch. Brass piston rod, suction and discharge, 1½ inches. Other sizes furnished up to 10,000 gallons per hour capacity. Price.....**$80.00**

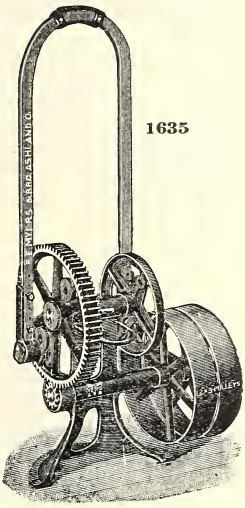
Send for Catalogue and Prices on Larger Size

MEYERS PUMP JACKS

Fig. 1635 represent the **Myers Universal Pump Jack,** designed to be used in connection with any ordinary windmill head pump without disarranging the pump or pipes in any manner. It is mounted on a substantial circular base which surround the pump stand, and is bolted securely to the platform, and also clamped to the pump stand, making a most substantial job. We believe this to be a more practical device than the ordinary cheap jack now in use, which is bolted direct to the body of the pump stand only.

The Universal Jack is fitted with steel shafts and our regular Bulldozer machine cut gear wheel and pinion. The connecting arms are hard steel in one continuous piece with lifting strain against edge of steel, which greatly increases the strength. The wrist pins are turned steel, held in position by heavy bolts. The pulleys are 12 inches in diameter.

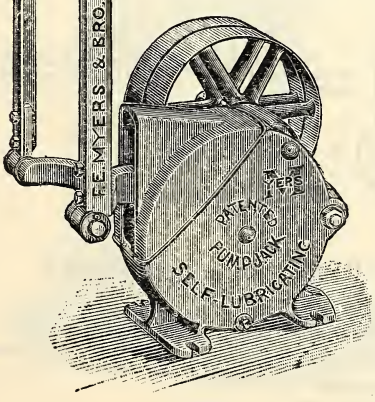
We offer the Universal Pump Jack to the trade as being the strongest and most complete device of its kind. **Price**.....**$16.00**



1635

Fig. 2029 illustrate the **Myers Self-Lubricating Pump Jack,** engine driven, a novel device in which all gears and moving parts are enclosed in a one-piece casting, forming the Oil Reservoir. This construction not only insures perfect and continuous lubrication, but protects the moving parts from dust and dirt, greatly increasing the life of the Jack. Furthermore, it guarantees perfect safety.

CONSTRUCTION—Gear and Pinion are machine cut and move in oil. The Gear is fitted with an eccentric cast integral which operates a walking beam hinged at one end to the main frame or base. The revolving of eccentric moves the forward end of walking beam vertically giving a 6-inch stroke to the pump piston. Can be used in connection with any make of Pump Stand. Has Angle Steel Arms, making as a whole the most durable Pump Jack on the market. **Price**.....**$19.00**



2029

The **Myers Master Double Gear Pump Jack,** as represented by **Fig. 2001,** is the latest production, especially designed for use with windmill pumps for deep well work. It is made extra wide, measuring 13 inches between the gear wheels, which adapts it for use with 3-way pumps. It has double gears and pinions.

The Gears and Pinions are 1⅜ inch face, machine cut.

The Wrist Pins are 1 inch in diameter, hard steel, machine smoothed, screwed into the gear wheel, and are secured in addition by a lock nut.

The Shafts are 1⅛ inch drawn steel securely keyed to the gears.

The Pulleys, 12 inches x 3 inches, are located in the center of the jack, providing for a center pull, thus doing away with all side strain as in other style jacks.

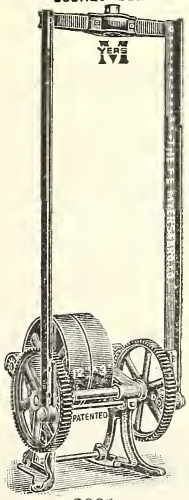
The Frame is made in two separate pieces, held together with ⅞ inch steel rods.

The Side Arms are angle steel bars, adjustable to any length stroke or height of pump.

The Crosshead is extra strong, fitted with a ball and socket joint to attach the pump rod. This socket joint prevents binding and removes all unnecessary strain and friction on the piston rod. The socket joint also permits the piston rod to pass through at any angle, or pump to set at any angle.

The **Myers Master Double Gear Pump Jack** is designed to meet the demand for an extra strong jack where great strength and wearing qualities are desired. **Price**....**$19.00.**

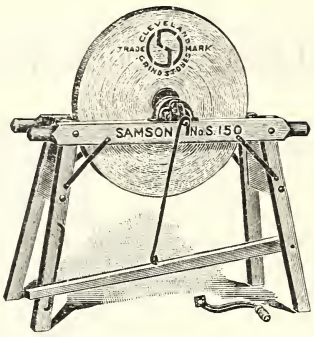
UNIVERSAL BALL & SOCKET JOINT



2001

All Prices Subject to Change Without Notice

WOOD FRAME GRINDSTONE



Made of good strong material. Stone of best berea grit. Hand or foot power.

Price.....**$9.00**

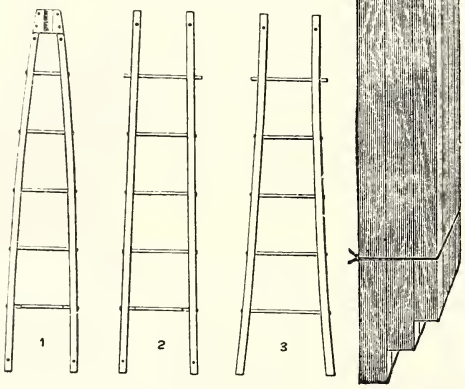
STEEL FRAME BALL-BEARING GRINDSTONES

Bicycle type with foot pedals very strongly built.
Price.....**$10.00**

PLOW HANDLES

NOT FINISHED

1 1/8x2	ins., 5	ft. long, per pair...	**$ .80**
1 1/4x2	ins., 5	ft. long, per pair...	**.90**
1 1/4x2 1/4	ins., 6	ft. long, per pair...	**1.25**
1 1/4x2 3/8	ins., 5 1/4	ft. long, per pair...	——
1 1/8x2	ins., side bend, per pair.....		——

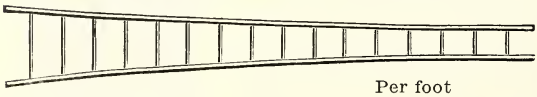


WINDOW CLEANERS' SECTIONAL LADDERS

All sections will fit into each other. To make ladders longer than three sections, use No. 2 sections. The only Window Cleaners' Sectional Ladder in which all sections are interchangeable.

No. 1, 6 feet long.....**$3.00**
No. 1, 7 feet long..... **3.50**
No. 1, 8 feet long..... **4.00**
No. 1, 9 feet long..... **4.50**
No. 1, 10 feet long..... **5.00**
Nos. 2 and 3, 6 ft. 3 in. long, **$2.50 each**
Less 10%

TILLEY SINGLE LADDERS

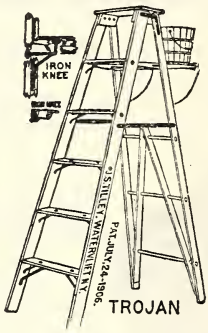


	Per foot	
10 ft. to 18 ft.....	**36c**	Less 20%
20 ft. to 22 ft.....	**40c**	
24 ft. to 26 ft.....	**44c**	
28 ft. to 30 ft.....	**Price on Request**	

TILLEY LADDERS

NOT A CHEAP LADDER, BUT THE BEST LADDER

TROJAN STEP LADDER

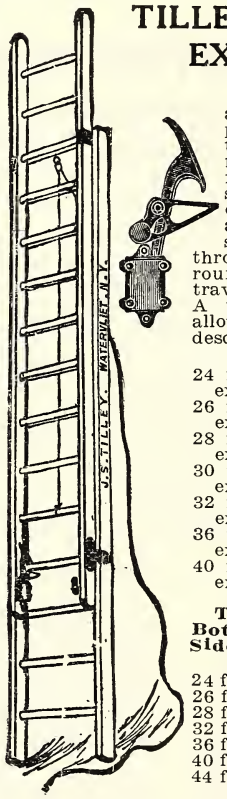


The strongest and best braced step ladder of its weight made. A combination knee, tie and angular brace under each end of each step, which passes down through the step, out through the sides and riveted at both ends forms a positive tie support and angular brace. The back legs fold over side of front, making a compact ladder particularly adapted for decorators and paper hangers.

Sizes 4, 5, 6, 7, 8, 10 and 12 steps. **70c per step, less 5%.**

HUDSON STEP LADDER.... 60c per step, less 5%
SPECK STEP LADDER..... 25c per step, net

TILLEY SPRING LOCK EXTENSION LADDER



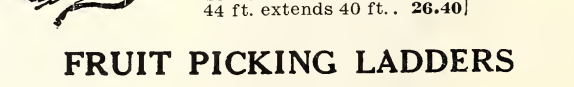
These ladders are stiff, strong and well built. Have improved patent spring locks attached to traveling sections, and are automatic in action. These locks are fastened securely to the inner sides of upper section, and made of the best malleable iron. They are also provided with a durable spring, which keeps the hook thrown forward and grasps each round of the stationary ladder as the traveling ladder passes upward. A tripper forces the hook back, allowing it to pass the rounds when descending.

Prices		
24 ft., 2-12 ft. sec., extends 21 ft.....	**$14.40**	Less 10%
26 ft., 2-13 ft. sec., extends 23 ft.....	**15.60**	
28 ft., 2-14 ft. sec., extends 25 ft.....	**16.80**	
30 ft., 2-15 ft. sec., extends 27 ft.....	**18.00**	
32 ft., 2-16 ft. sec., extends 29 ft.....	**19.20**	
36 ft., 2-18 ft. sec., extends 33 ft.....	**21.60**	
40 ft., 2-20 ft. sec., extends 36 ft.....	**28.00**	
44 ft.....	**30.80**	

Tilley Liberty Extension Spread Bottom Ladder or with Parallel Sides.

Prices		
24 ft. extends 21 ft..	**$12.00**	Less 20%
26 ft. extends 23 ft..	**13.00**	
28 ft. extends 25 ft..	**14.00**	
32 ft. extends 29 ft..	**16.00**	
36 ft. extends 33 ft..	**18.00**	
40 ft. extends 36 ft..	**24.00**	
44 ft. extends 40 ft..	**26.40**	

FRUIT PICKING LADDERS

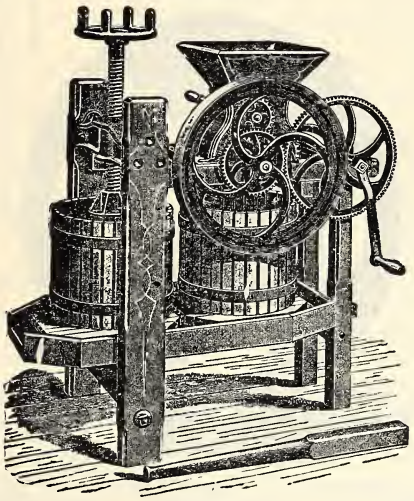


The strongest and best fruit picking ladder made.

	Per foot	
15 feet.....	**36c**	Less 10%
17 feet.....	**36c**	
19 feet.....	**38c**	
21 feet.....	**40c**	

DOUBLE-CAGE CIDER MILL

These mills are made in three sizes, Junior, Medium and Senior. Capacity of Junior, 2 to 4 barrels per day; Medium, 4 to 6 barrels per day.

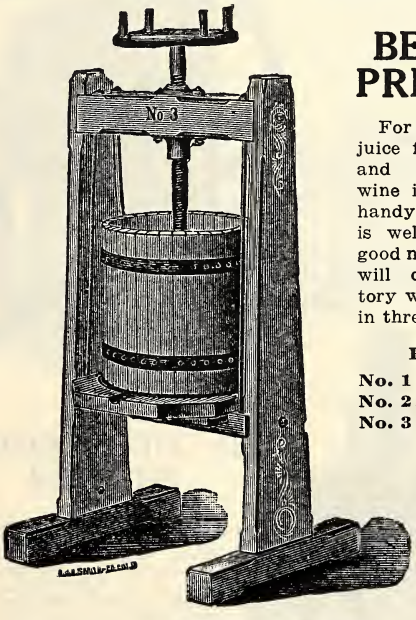


SENIOR

They have adjustable rollers and feed regulator and double crank. In these Mills the lower rollers are cast with alternate rims and grooves interlocking to draw in the apples. Fruit is mashed between the smooth segments, thoroughly breaking all the cells so that cider is entirely extracted in press. Balance wheels are heavy, and mill can be run by power. The mills are very strong. They are made of best material, nicely finished, and are easy to operate. Capacity, 6 to 12 barrels of cider per day. Weight, 390 pounds.

Prices:

Junior (small)....**$27.50** **Medium**.....**$31.50**
Senior (large).....**$47.50**



BERRY PRESSES

For pressing juice from grapes and berries for wine it is a very handy machine. It is well made, of good material, and will do satisfactory work. Made in three sizes.

Prices:

No. 1.....**$ 8.50**
No. 2..... **10.60**
No. 3..... **17.00**

HOTBED SUPPLIES

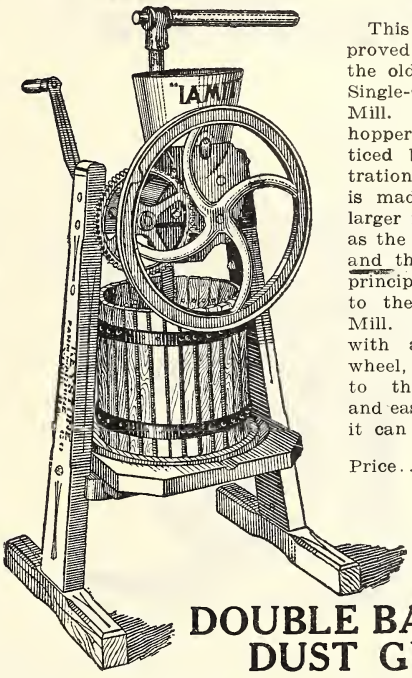
Best White Pine Sash—Made to hold either 24 or 28 8x10 panes. These Sashes are grooved so that the panes slide in and butt one against the other. Price of either size, **$2.00** each.

Hotbed Glass—8x10. Per box of 90 panes, **$3.00.**

Hotbed Mats—(Fig. 23). Interlined with wool. 40x76 size, covers 1 sash, **$2.00;** 76x76, covers 2 sash, **$3.25.** Special prices by dozen.

Van Reyper's Glazing Points—(Fig. 19). Simple and positive, no rights or lefts. Per 1,000, **60c;** by mail, **75c.** Pincers, **50c** per pair; by mail, **60c.**

"IAMIT" CIDER MILL



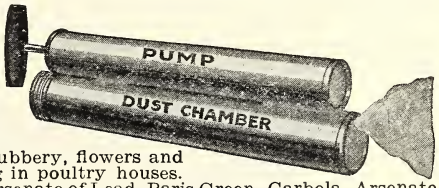
This is an improved pattern of the old Hutchinson Single-Cage Cider Mill. The enlarged hopper can be noticed by the illustration. This change is made to give a larger feed opening, as the small hopper and throat are the principal objections to the Hutchinson Mill. Equipped with a heavy fly wheel, which adds to the steadiness and ease with which it can be operated.

Price.....**$18.00**

DOUBLE BARREL DUST GUN

Specifications

CONSTRUCTION—Heavy tin, nicely enameled red.
LENGTH—13½ inches.
FILLING—Large opening, with heavy screw cap, cork lined.



The Double Barrel Dust Gun will handle all insecticides and is used for dusting vegetables, shrubbery, flowers and for dusting in poultry houses. Handles Arsenate of Lead, Paris Green, Carbola, Arsenate of Calcium, Sulphur, etc.

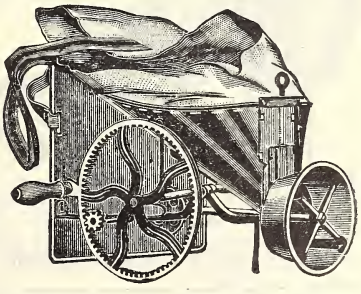
Provided with large dust chamber which is easily filled. With each stroke of the pump, the gun throws out a broad cloud blast of dust, thereby rapidly covering large areas. Easily operated. Efficient and wastes no dust.

Price.....**75c.**

CAHOON'S BROADCAST SEED SOWER

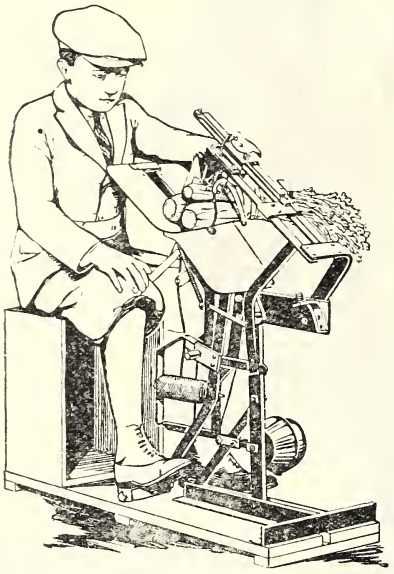
For Sowing Clover, Timothy, Millet, Oats, Wheat, Hemp, Barley, Rye, Rice, Buckwheat, Etc.—Standard Seeder of the World—A Model for Accuracy and Durability—Malleable Iron Frame—Steel Hopper and Gate—Brass Discharger.

The breadth of the cast will be according to the weight of the seed. Wheat and rye, 30 to 36 feet; oats, 21 to 25 feet; barley, 27 to 33 feet; clover, millet, Hungarian seed, 20 to 24 feet; hemp, 27 to 30 feet; timothy, 15 to 18 feet.



Our Special Price, $6.00.
By Parcel Post, **$6.25.**

FELIN'S VEGETABLE TYING MACHINE

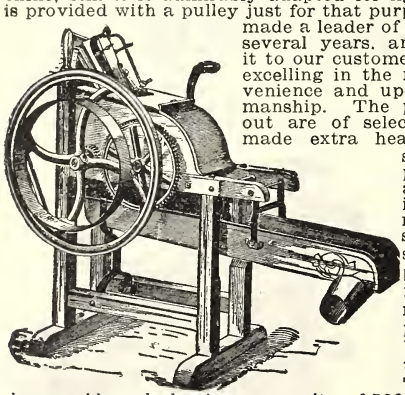


It is a well known fact, that any mechanical device designed to save labor and time on the farm, is a real money maker for the farmer. This machine for bunching and tying vegetables, such as beets, carrots, radish, parsnips, etc., will save both time and money. Well constructed of good material, easily operated by any twelve year old boy. Will tie bunches any size from one-quarter to five inches. Automatically adjusted to any size bunch. Special literature upon request.

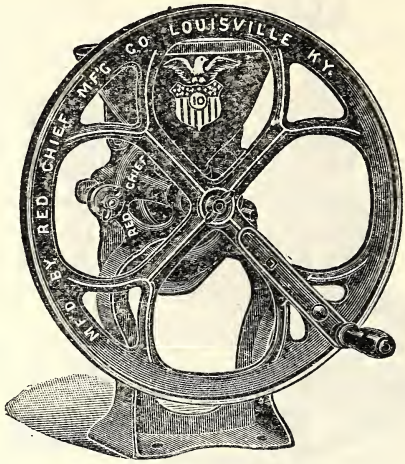
Price.....**$75.00**

"BUCH'S No. 7" DOUBLE SPOUT CORN SHELLER

While this sheller is used principally as a hand machine, still it is admirably adapted for light power and is provided with a pulley just for that purpose. We have made a leader of this Sheller for several years. and recommend it to our customers as a Sheller excelling in the matter of convenience and up-to-date workmanship. The parts throughout are of selected materials, made extra heavy and very strong. Well put together and nicely finished. Cold rolled steel shafts and steel shaker pitman. Journal boxes are made in two parts and can be adjusted to take up wear. This Sheller does rapid work, having a capacity of 500 to 600 bushels per day. Price, with shaker, **$32.00.**



"RED CHIEF" GRINDING MILLS

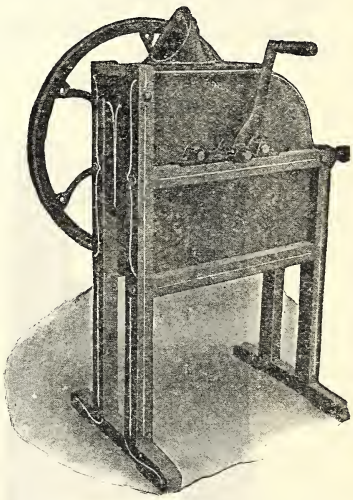


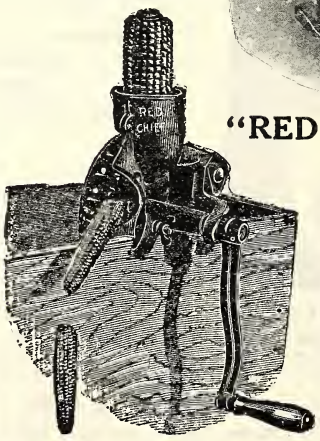
Does rapid work. Will grind meal or crack the grain any desired size. Strong, durable and neatly made.

No. 1—Without flywheel.....**$ 4.00**
No. 2—With flywheel..... **5.50**
No. 5—Without stand..... **7.00**
No. 10—With stand..... **8.50**
No. 20—Combined Hand and Power..... **20.00**

"BUCH'S No. 2" SINGLE SPOUT CORN SHELLER

This very popular Sheller is well made, light running, and will give good service. It has large balance wheel, with heavy rim and wrought-iron spokes. The journal boxes are engine bored and bolted to hardwood frames. Handsomely finished. Separates corn from cob. With sieve, **$15.00**

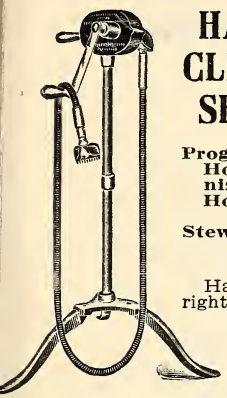




"RED CHIEF" CORN SHELLER

This is undoubtedly the best Sheller of its class. It has a suitable device for adjusting it to take either large or small ears, and do good work with either. It readily attaches to barrel or box, and is just the thing for persons who have but a small quantity of corn to shell.
Price.....**$2.75**

See page 23 for "Wisdom" Tomato



HAND POWER HORSE CLIPPING AND SHEEP SHEARING MACHINES

Progressive, Up-to-Date Farmers and Horse Owners Everywhere Recognize the Advantage of Clipping Horses.

Stewart No. 1 Enclosed Type Ball-Bearing Clipping Machine
(Latest Model)

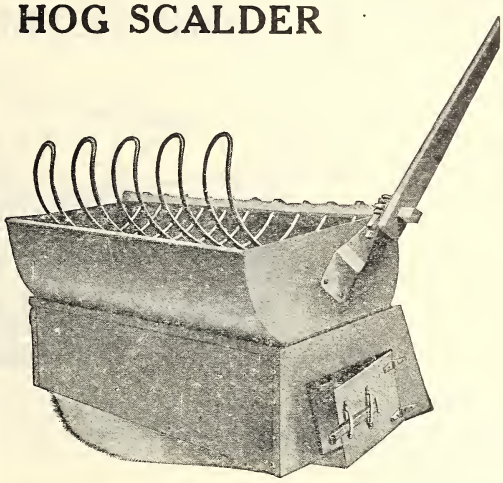
Has new style rigid base; tubular upright. All gears are cut from solid metal and are enclosed in a dust-proof metal box. They run constantly in a bath of oil, which reduces friction to a minimum. All wearing parts are hardened tool steel. New type, light, easy running, flexible shaft, 6 feet long. Complete, with one set of Stewart's 1-nut tension knives. Weight, boxed, 36 pounds.
Price.....$14.00

SHEEP SHEERING ATTACHMENT

For Use on Our No. 1 or No. 2 Horse Clipping Machine

This attachment consists of complete No. 5 Stewart Shear Head, 4 sets of shearing knives, the solid core, universal jointed shaft and cogs, as shown here. Weight, boxed, 15 pounds. Price of complete attachment as described, **$12.50.**

IMPROVED BAUSMAN HOG SCALDER



The difficulties in scalding hogs have been many. No longer are you compelled to resort to hoisting appliances. No longer do you have to lift a hog from the scalding bath by the old laborious methods.

In the new Improved Bausman Hog Scalder you have an appliance that will save half the time and most of the hard labor in connection with hog-killing.

SPECIFICATIONS

Scalder

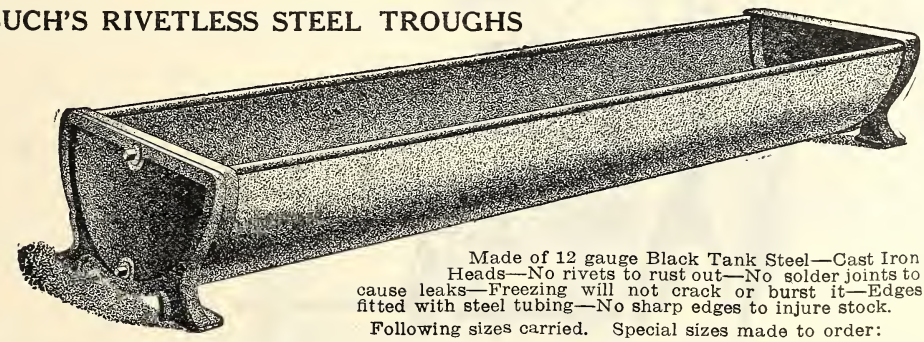
Dimensions—6 feet long; 2½ feet wide; 1½ feet deep.
Shell—Made of No. 12 gauge steel.
Dumping Rack—Made of 1¼ inch square steel with bars of ¾ inch round iron.
Gear and Ratchet—Heavy cast iron.
Weight—325 pounds.
Finished with a coat of high grade asphaltum.

Fire Box

Dimensions—6 feet long; 18 inches high; 30 inches wide at bottom, 22 inches wide at top.
Material—No. 12 gauge steel.
Weight—120 pounds.
Finished with a coat of high grade asphaltum.
Provided with a a Vent for pipe and a roomy opening for fuel as illustrated.

Price Complete with Firebox, $55.00; Scalder less Firebox, $40.00

BUCH'S RIVETLESS STEEL TROUGHS



Made of 12 gauge Black Tank Steel—Cast Iron Heads—No rivets to rust out—No solder joints to cause leaks—Freezing will not crack or burst it—Edges fitted with steel tubing—No sharp edges to injure stock.

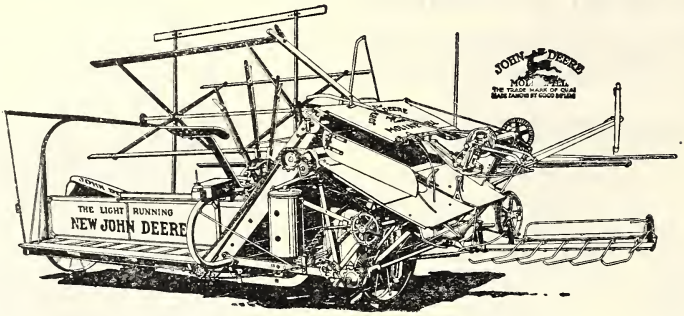
Following sizes carried. Special sizes made to order:

No.	Length Feet.	Width at Top Inches.	Depth Inch.	Capacity Gals.	Weight Lbs.	Price.
58	5	14	8	20	65	**8.00**
59	6	14	8	24	76	**9.75**
60	8	14		32	93	**11.85**
61	10	14	8	40	119	**14.70**
69	5	16	9	30	70	**9.25**
70	6	16	9	36	85	**11.25**
71	8	16	9	48	111	**14.40**
72	10	16	9	60	127	**17.00**
80	5	18	10	40	91	**10.60**
81	6	18	10	48	102	**12.50**
82	8	18	10	64	122	**15.90**
83	10	18	10	80	141	**19.90**
84	12	18	10	96	168	**24.00**

CAST IRON HOG TROUGHS

No seams for food to lodge in, and, being easy to clean, there is no likelihood of foul, unhealthy odors. There is no danger of bursting from freezing, and the price is within the reach of all. These Troughs are very popular with all who use them. The width of these Hog Troughs at the top is 12 inches and at the bottom 2 inches; the depth is 6 inches, and the capacity per foot is 2 gallons. They are made in lengths as follows: 2, 2½, 3 and 3½ feet, and so on, every half foot, up to 8 feet. Price, per foot, **90c.**

THE LIGHT-RUNNING NEW JOHN DEERE GRAIN BINDER



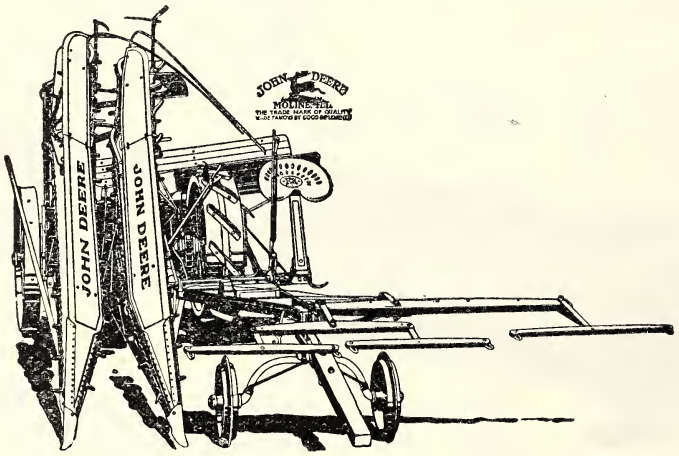
This Light-Running New John Deere Grain Binder is easier on the horses and will go through places where a machine requiring more power would choke down. Its light-running is a feature that you notice from the very start. This light-running advantage not only means less work for you and your horses, but the light-running qualities that are built into the binder reduce friction and wear, resulting in longer life for the machine and less trouble and expense for you.

From the sickle that does the cutting on to the knotter that does the tying, and to the bundle carrier that does the dumping, you will find improvements and refinements that make the John Deere easier-running, easier to keep in running order, more durable, easier to operate, and a better working binder under all field conditions.

SEND FOR SPECIAL CATALOGUE

JOHN DEERE CORN BINDER

FAMOUS FOR ITS BETTER WORK UNDER DIFFICULT FIELD AND CROP CONDITIONS



The ability of the John Deere Corn Binder to do better work over a longer term of years under difficult field and crop conditions is an outstanding quality. Many users say that they cut their corn successfully with their John Deeres under conditions that keep less efficient binders in the shed.

There is no one feature responsible for this better performance. It is the result of years of development resulting in improvements in design to meet the unusual situations. The John Deere has an unusual amount of traction which is very important. This provides ample power to insure positive and continuous passage of the corn from the time it enters the gatherers until the bundles are discharged free from the path of the horses.

Positive Delivery of Stalks to Binding Attachment

Lodged and tangled corn is readily picked up by the gatherers. The gatherers are wide at the points and can be accurately set at any desired distance from the ground.

As the corn enters the gatherers, four chains carry the corn to the binding attachment. In addition, two top gather chains with long lugs help to keep the tops straight and assist in forming well-shaped bundles. The two steel throat springs, adjusting themselves to any volume of corn, hold the corn into the chains.

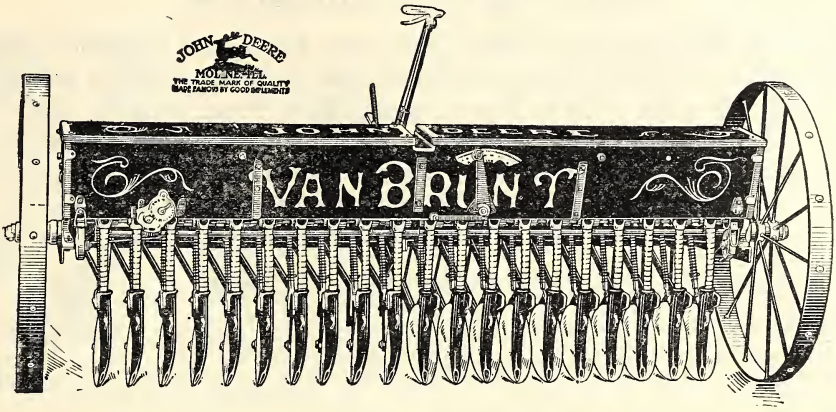
The butt chain is equipped with long, wide folding lugs that extend across the throat of the machine and prevent the butt end of the stalks from lagging.

This combination carries the corn in the easiest and most positive manner to the binding attachment, with minimum loss of ears.

SEND FOR SPECIAL CATALOGUE

VAN BRUNT ALFALFA, GRASS SEED AND HEMP DRILL

FURNISHED WITH DISCS OR SHOES



The Drill That Plants Alfalfa and All Kinds of Grass Seed Evenly at Uniform Depth

This drill meets a rapidly growing demand for a special machine that will sow from four to one hundred and fifty pounds of alfalfa seed per acre, and all kinds and sizes of grass seed evenly and without bunching or cracking.

It sows 20 rows 4″ apart, enabling the operator to plant his seed as close as required, and at any desired depth.

Broadcasting high priced seed with small kernels like alfalfa and clover is wasteful.

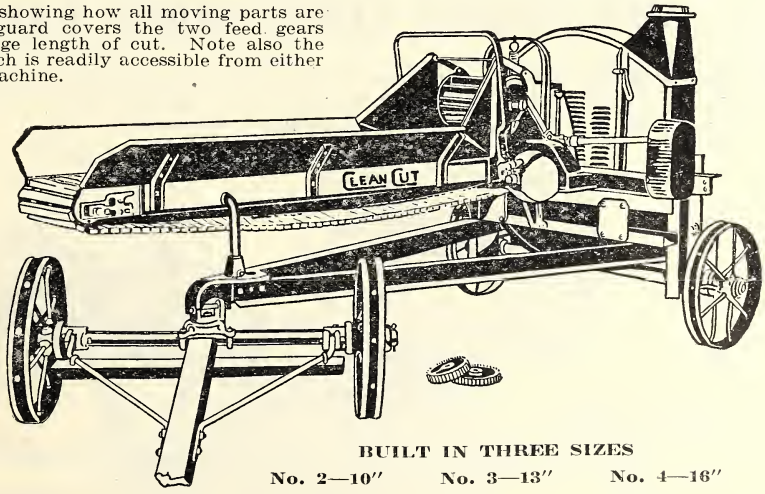
Only half the amount of seed is required when drilled, as each tiny seed is planted at just the right depth and properly covered.

This drill is valuable for reseeding meadows or alfalfa fields with bare spots. "Hide bound" sod can be cut through with the discs and hay fields or pastures renewed without plowing or working over.

SEND FOR SPECIAL CATALOGUE AND PRICES

MOUNTVILLE CLEAN CUT SILO FILLERS

Left side view of 13″ Clean Cut showing how all moving parts are well guarded. The large hinged guard covers the two feed gears which are simply reversed to change length of cut. Note also the position of the feed control bar which is readily accessible from either side or any position around the machine.



BUILT IN THREE SIZES

No. 2—10″ No. 3—13″ No. 4—16″

Heavy Steel Fan Case

The fan case is made entirely of heavy gauge sheet steel, all being securely electric welded in such a way as to make inside of case perfectly smooth—no friction or resistance. Instead of using a breakable cast iron case, we use an all steel case which is stronger and perfectly safe in case of stones and foreign material getting into the machine—sheet steel may be forced to bend or tear, but it will never break or fly to pieces like iron. Fan case opens up wide to permit plenty of room for adjustment of knives. Top is hinged and is fastened securely by two handy eccentric lever fasteners.

Exclusive Cushion Spring Drive and Reverse Mechanism with Convenient Control Bar

The exclusive cushion spring drive mechanism is another special feature offered in "Clean Cut." This simple, strong and effective spring drive relieves the shock and jar to the entire machine, thus avoiding delays and repair bills so frequent with the ordinary reversing device. Those with experience will appreciate this remarkable feature. Reversing is instantly accomplished without changing mesh of gears and by light pressure as there is no mass of gears to lift. Starting, stopping or reversing of feeding table and rolls is instantly accomplished from either side of the machine, and the position of the control lever enables operator to stop machine instantly by pressure of arm or shoulder in case of emergency.

All bearings of the feed mechanism are separate from frame and removable in case of wear. The beveled gear shift bearings are adjustable to take up end thrust and to secure proper mesh of gear. Beveled gears are enclosed and protected from dust and dirt.

Slow speed and smooth running. Require a minimum of power. All sizes are guaranteed to cut ensilage uniformly and to elevate it into any silo regardless of height.

SEND FOR SPECIAL CATALOGUE AND PRICES

JOHN DEERE WAGON

Built Up to a Guarantee

Heavy Maleable Fifth Wheel Bolster Plate with Corrugated Coupling. Skeins, extra heavy, of Special Sand- and Dust-Proof Pattern. Selected Hickory Axles; Extended Circle Irons; Square Wood Front Hounds; Full Clipped Gears; Full Size Reach. Bolster Stakes, 8- or 13-inch over all, with Rings; Heavy Malleable Pole Housing on Slip Tongue Wagons; Deep Hind Bolster; Singletree, Full Strap and Hook Pattern; Heavy Iron Reach Box

When you buy a John Deere Wagon you get more than merely an assembled product made to sell. You buy high-grade materials. You but the skill of designers and builders who have given their work a lifetime of study. You buy many years of hauling service.

The John Deere organization controls the quality of every piece of material that goes into a John Deere Wagon. All parts are made in our own factory, under careful supervision and rigid inspection. The John Deere trademark on a wagon is assurance that the materials under the paint, as well as the paint itself, are of good quality.

The quality to be found in a John Deere Wagon is representative of the quality that distinguishes the John Deere Plows and other equipment—quality that has enabled the John Deere organization to grow and prosper through nearly a century.

You will take pride in your purchase of a John Deere Wagon, not only in its appearance, but also in its strength, duability and light-running qualities.

SPECIFICATIONS

Size	Capacity Lbs.	Wheel Heights	Regular Tire	Tires, other than regular, which can be furnished
Light	1500	Wagons of any size	1 ⅜ x ½	2 x ⅜, 2 x ½, 2 ½ x ⅜, 3 x ⅜, 4 x ⅜
Medium South	3000	listed here can be furn-	1 ½ x ⅝	2 x ½, 2 ½ x ½, 3 x ⅜, 3 x ½, 4 x ⅜
Medium North	3000	ished with wheels of the	1 ½ x ⅝	1 ½ x, ¾ 2 x ⅝, 2 ½ x ⅝, 3 x ½, 3 x ⅝, 4 x ½
Standard	4500	following heights:	1 ½ x ⅝	1 ½ x ¾, 2 x ⅝, 2 ½ x ⅝, 3 x ½, 3 x ⅝, 4 x ½, 4 x ⅝
Heavy	6000	36-40, 40-44 or 44-48	2 x ⅝	2 ½ x ⅝, 3 x ⅝, 3 x ¾, 4 x ½, 4 x ⅝

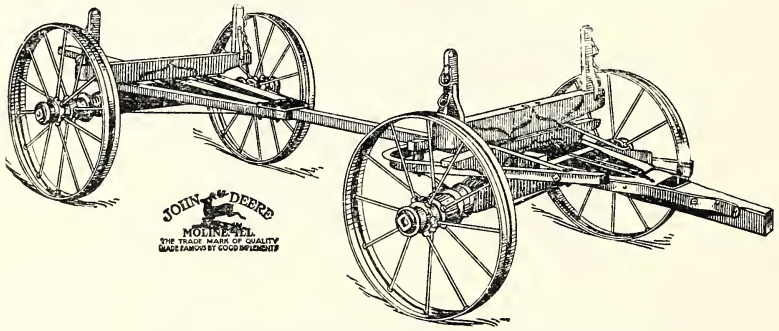
All wheels 40 inches and lower in height are furnished with twelve spokes only; 44-inch wheels and higher have fourteen spokes.

SEND FOR SPECIAL CATALOGUE AND PRICES

OUR HANDY STEEL-WHEEL FARM TRUCKS

All wood parts hardwood and well painted. Note the grooved tire, which protects the spokes of the wheel, and they last much longer than flat-tire wheels. Made in two sizes—No. 22 with 3x9 skeins, capacity 3,000 pounds; No. 24 with 3¼x10 skeins, capacity 4,000 pounds. Both Nos. 22 and 24 Trucks have 28-inch front and 30-inch rear wheels, 4x⅝ tires. Weights—No. 22, 475 pounds; No. 24, 510 pounds.

Above Truck can be furnished with wood wheels. Price, **$50.00.**



Wood Hounds, Well Braced; Hickory Axles.

FARM AND CONTRACT CARTS

Our Carts are built of hardwood, good dry stock. Bodies have 6-inch top sides. Wood hub wheels. The sizes we mention are those most popular with our trade, but we can furnish any size desired. The Carts are nicely finished and handsomely painted. They have but to be seen in comparison with others to be appreciated.

No. 38 FARM CART—1½-inch axle, 2x½-inch tire; body, 3 feet wide, 5 feet 1 inch long, 11 inches deep, without top sides; capacity, 1,000 pounds. Price on application.

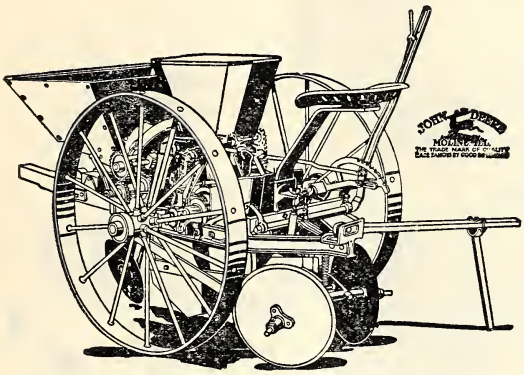
No. 41 FARM OR LAWN CART—1¾-inch axle, 4x½-inch tire; body, 3 feet wide, 5 feet 4 inches long, 12 inches deep. Price on application.

No. 42 CONTRACT CART—2-inch axle, 3x½-inch tire; body, 3 feet 1 inch wide, 5 feet 10 inches long, 13 inches deep, without top sides; capacity, 2,000 pounds. Price on application.

Fill Your Wagon With "Wisdom" Tomatoes (See Page 23)

JOHN DEERE-HOOVER VISIBLE POTATO PLANTER

WITH AUTOMATIC SEED CONTROL



Automatic Seed Control Insures Accuracy

Planting accuracy is the most desirable quality in a potato planter. It must be accurate to be successful.

Accuracy of the John Deere-Hoover Planter is maintained by automatically controlling the quantity of seed in the picking chamber—a small uniform number of seed is in the chamber at all times.

This Automatic Seed Control, an exclusive Hoover feature, insures maximum efficiency in the operation of the pickers and concaves, which means a steady, uniform drop—accurate planting.

Picking Chamber Has Correct Shape

Because of the special shape of the picking chamber, the seed is fed to the concaves in such a way as to insure proper handling by the eight picker arms which revolve on the axle.

Built Up Strong Throughout

The main frame is made of channel steel and is well braced for supporting the various parts, making a durable, well-balanced machine of neat and attractive design.

40-Inch Drive Wheels. The drive wheels are 40 inches in diameter and have 4-inch concave tires, with a 35-inch tread.

The Hoover Is Visible. Every operation of the planter is in full view of the driver from seat at the rear of the machine.

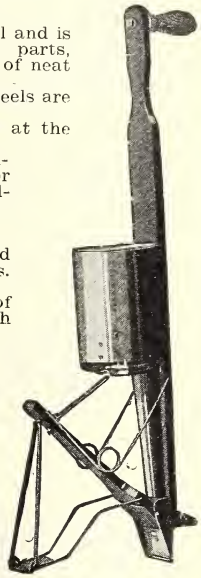
Big Hopper, with Agitator. The potato hopper is placed well forward. It is made of galvanized steel with reinforced rolled top. It has a capacity of three bushels. It is equipped with agitator which absolutely prevents bridging and insures uniform movement of the seed to the feed wheel which automatically conveys the seed to the picking chamber.

Spacing is Easily Changed

The arrangement for changing the dropping distance is simple. Sprocket wheels can be furnished in different sizes for various spacings as follows: 9, 11, 13, 14½, 16, 17½, 19½, 22 and 24 inches. Each wheel is marked in inches.

To plant potatoes at any given distance in the row, place the proper sprocket wheel on the end of the intermediate shaft by removing spring cotter in the end of shaft. After placing the wheel with chain in position, replace spring cotter. Any two sprocket wheels are furnished regularly.

Price with Fertilizer Attachment **$142.00**



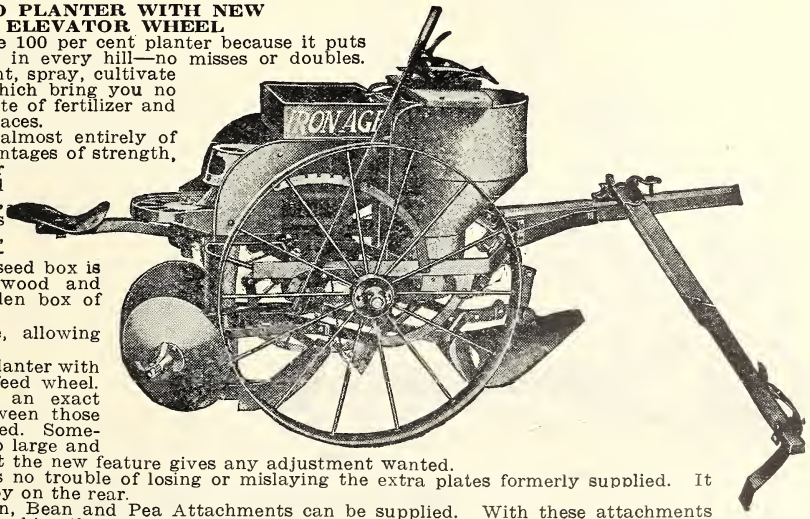
THE ACME ROTARY AUTOMATIC HAND CORN PLANTER

Full rotary drop. Pressed steel hopper. Adjustable cast disk or seed plates. Maleable ratchet lever. Brass spring cut off. Double coil main spring. Extreme accuracy of drop due to novel exclusive and common sense design of seed plates, and brass spring cut-off or stripper. Double coil spring automatically rotates disc and closes jaws. Used in one hand like a walking stick. Disk is set for correct number of kernels by loosening thumb nut. moving star till pockets are of right size, then tightening thumb nut again. Plunge planter in ground rock forward to trip seed, and withdraw.

Price $2.50

"IRON AGE" (IMPROVED ROBBINS) POTATO PLANTER

No. 40LE POTATO PLANTER WITH NEW ADJUSTABLE ELEVATOR WHEEL



This planter is known as the 100 per cent planter because it puts one seed piece, and only one, in every hill—no misses or doubles. You do not plow, harrow, plant, spray, cultivate and dig over missed spaces which bring you no profits. It also avoids the waste of fertilizer and spray material on unplanted spaces.

The planter is constructed almost entirely of steel. This gives decided advantages of strength, lightness and compactness over planters with cast-iron or wood frames. It is perfectly balanced, with less weight for the horses to pull. There are no heavy, bulky castings to replace because of breakage. The steel seed box is lighter, more durable than wood and holds more seed than a wooden box of the same size.

The construction is simple, allowing you to get at all parts easily.

We are now equipping this planter with our new patented adjustable feed wheel. This wheel is adjustable to an exact variation giving all sizes between those of the extra plates formerly used. Sometimes one plate was a little too large and the other a little too small, but the new feature gives any adjustment wanted.

With this new plate there is no trouble of losing or mislaying the extra plates formerly supplied. It also reduces the work of the boy on the rear.

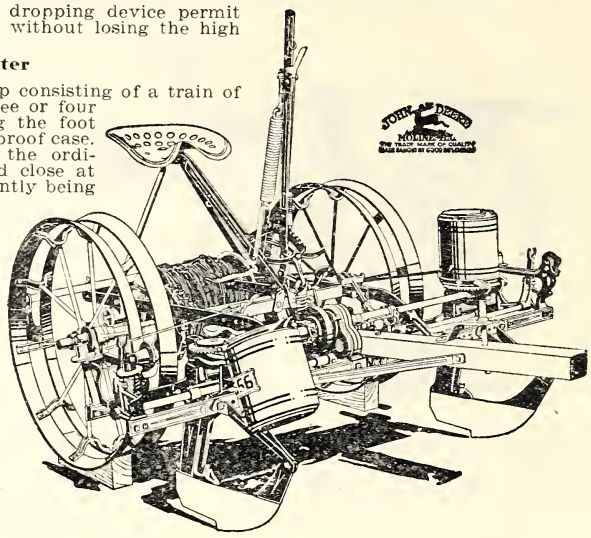
Side Dressing, Ridging, Corn, Bean and Pea Attachments can be supplied. With these attachments truckers can find use for the machine throughout the season.

Making up rows, opening furrows and covering them can be done with the regular machine.

Price with Fertilizer Attachment $145.00

JOHN DEERE NO. 999 CORN AND BEAN PLANTERS

The shape of seed cells and improvements in the dropping device permit planting tip or butt kernels without cracking seed or without losing the high degree of accuracy.



The Full Variable Drop Planter

The John Deere No. 999 Planter has a variable drop consisting of a train of gears constantly in mesh. With this device, two, three or four kernels can be planted as desired merely by shifting the foot lever. The gears are enclosed in an oil-tight and dust-proof case.

The driving mechanism has this advantage over the ordinary—it never is separated. Other devices open and close at every actuation of the fork by the wire, and are constantly being released under strain, causing considerable wear and reducing the life of the most important parts of the planter. The device on the John Deere No. 999 Planter can be shifted at any time in the travel of the machine.

The John Deere No. 999 is a real variable-drop planter—it varies the distance in drilling as well as the number of kernels per hill in hilling, and gives a greater variety of distances without the use of extra sprockets and plates.

All regular plates on this planter have 16 cells and by means of the variable drop gears, they give the same drilling distances as other planters which have no variable drop gears, using 8-, 12- and 16-cell plates.

Plants Many Varieties of Corn

Seed plates can be furnished for handling every kind of corn; also beans, sorghum, milo maize and other seeds. The improved form of cut-off has a quick action. The spring roller knocker causes each kernel to be discharged from the plate cell without fail.

There are no ridges or obstructions in the valves to catch and hold the kernels. Sufficient opening is left just above the upper valve to enable operator to see the kernels as they are collected for the hill.

Hilling and Drilling

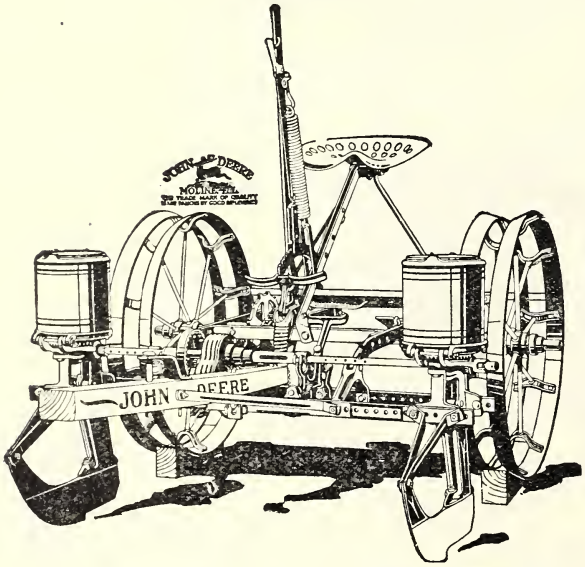
The change from hilling to drilling, or vice versa, is instantly made. No extra attachments, no extra cost and no extra tools are required. To drill, it is only necessary to hook the foot drop rod over the small casting on the rock shaft, using notch nearest the end, and then press down on the foot lever until it locks automatically in the position shown by the shaded portion in the illustration. There is no switching of the valves, no addition or removal of parts, and the drilling distances most commonly used are had without changing seed plates. When turning at the end of rows, a slight pressure of the foot on the treadle unlocks the lever and stops the drilling. When used for foot dropping at the ends of field, the lever is hooked in second notch from end.

This Planter will narrow into 2 ft. 4″ rows

SEND FOR SPECIAL CATALOGUE

THE JOHN DEERE SPECIAL BEAN DRILL

FOR DRILLING PEAS, BEANS AND CORN



John Deere No. 919 Drill

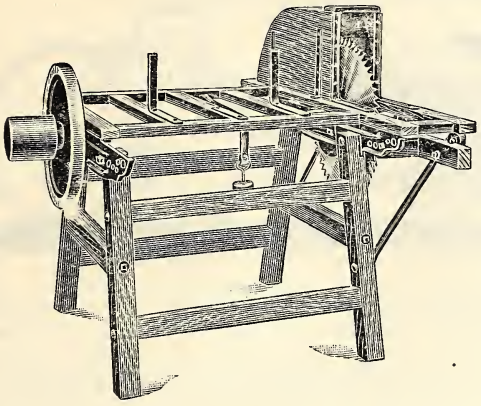
The John Deere No. 919 Drill is the same in general construction as the No. 999 Check Rower Planter. As it is intended for drilling only, it is not equipped with check rower and valve mechanism. Simplicity of construction, accuracy and reliability in drop make this machine a superior two-row drill.

It is just as desirable to have the seed properly spaced with unfailing accuracy when drilling as it is to drop three or any other number of kernels in the hill when check-rowing. The No. 919 Drill easily satisfies the most exacting requirements.

Price, $70.00

SEND FOR SPECIAL CATALOGUE

SAW TABLES AND SAWS



AMERICAN SLIDE-TABLE SAW

A splendid machine. The frame is constructed of 4-inch hardwood mortised and bolted. The arbor is 1⅝-inch cold rolled steel. The distance from fly-wheel to saw is 3 feet 1½ inches. The table operates on rollers, which run on a grooved and smooth track, and a cast guide keeps it in position. An iron counterbalance, not shown in illustration, is furnished. This is attached by a rope to the table, and brings it back to position when the cut is made. The machine is furnished with a guard, as shown in illustration. The saw blade is the very best obtainable, and will be replaced free if found defective. Left-handed machines, as shown in illustration, furnished, unless otherwise ordered. Weight, 400 pounds. Speed, 1,000 revolutions per minute when a 24-inch saw is used.

Prices:

With 26-inch saw	**$40.00**
With 28-inch saw	**42.00**
With 30-inch saw	**44.00**

WOOD AND POLE SAWS

The frames are made of selected seasoned hard wood, accurately mortised and tenoned and securely bolted together by steel rods alongside the girts and passing through from one side of the frame to the other. They are strongly braced in every direction and handsomely painted with two coats of brilliant red paint on the wood and black on the iron parts.

The mandrels are polished steel, perfectly true and run in heavy babbitted boxes. On the Nos. 3, 4 and 5 these boxes are united by a heavy cast-iron yoke, insuring perfect alignment and cool bearings

The balance wheels are accurately balanced, insuring a quiet, steady-running, durable machine. They weigh from 75 to 80 pounds, which is best for general work, but we can supply heavier balance wheels when desired at small extra cost.

Each machine is fitted with a strong, adjustable saw guard that will admit any size saw from 20 to 30 inches.

No. 4 has extension table for cutting poles of 4 or 8-foot cord wood. By changing the iron guard to the opposite end of the tilting table this machine can be set up exactly as No. 3.

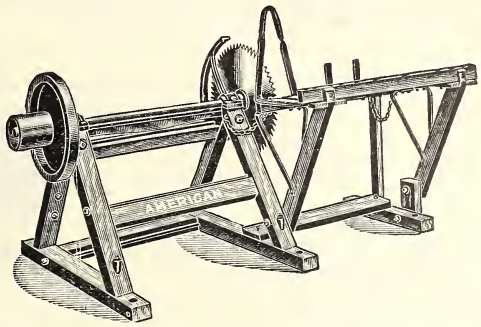
Prices:

24-inch blade	**$41.00**
26-inch blade	**42.00**
28-inch-blade	**43.50**

PORTABLE AND STATIONARY SAW OUTFITS—Send for special catalogue.

Believing that a cheaply built wood saw is dear and a bad investment at any price, we have always sold high-grade machines only, and, value compared with cost, we are giving greater value than is possible in the cheaply built machines.

The table is so arranged as to extend nearly five feet beyond the saw blade. It makes a highly satisfactory combined pole and cordwood saw, because the length



and arrangement of the table is such as to enable the operator to handle long poles about as easily and rapidly as cord wood. To facilitate handling a roller is placed at one end of the table. Weight, 354 pounds.

Prices:

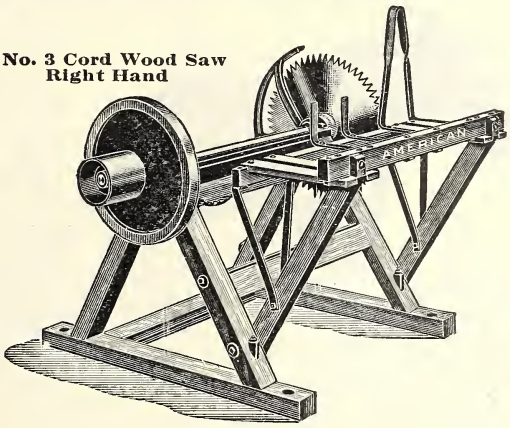
Without saw	**$33.50**
With 24-inch saw	**41.00**
With 26-inch saw	**42.00**
With 28-inch saw	**43.50**
With 30-inch saw	**45.00**

We carry a full line of CIRCULAR SAWS:

22-inch, No. 12 gauge	**$ 5.00**
24-inch, No. 11 gauge	**6.00**
26-inch, No. 11 gauge	**7.00**
28-inch, No. 10 gauge	**8.00**
30-inch, No. 10 gauge	**9.00**

SAW MANDRELS—Write for special circular of sizes and prices.

No. 3 Cord Wood Saw
Right Hand



Specifications.

Mandrel, 1½ in. diameter, 52 in. long.
Distance saw to balance wheel, 42 in.
Mandrel pulley, 6x6 in.; speed, 1,200 to 1,800, depending on size saw.
Will take saws 20 in. to 30 in. with 1¼ in. hole.
Shipping weights, No. 3, 300 lbs.; No. 4, 330 lbs. No. 5, 385 lbs.; No. 6, 335 lbs.
These machines are regularly shipped knocked down. Shipped set up if so ordered, without extra charge.

CORD WOOD SAW MANDRELS

For those desiring to make their own wood work, we can furnish Mandrels with balance wheel, pulleys and boxes. These are always made right-hand and furnished with yoked boxes, as shown above. unless otherwise ordered. If desired, they can be furnished with flat boxes without the yoke. Can also be furnished without balance wheel. Pulley is 6-inch diameter by 6-inch face. Weight of Mandrel, with boxes, pulley and balance wheel, 160 pounds.

Price **$20.00**

NEW JOHN DEERE Narrow Type Tight Bottom

The Low-Down Spreader With the Beater on the Axle and the Box-Roll Turn

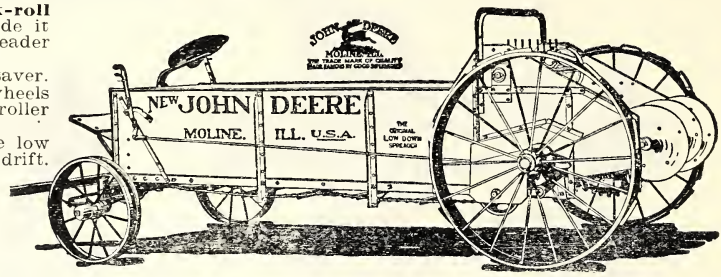
The **beater on the axle** and the **box-roll turn,** both exclusive features, have made it possible to give you these distinctive spreader advantages:

—a low, easy loading box—a real labor saver.

—lighter draft because of high drive wheels and fewer moving parts, combined with roller bearings.

—better work because the beaters are low down—winds will not cause the manure to drift.

—longer life resulting from simplicity of design, and higher grade materials and workmanship.



The New John Deere Spreader Saves Real Work in Loading

The easy-loading feature on the New John Deere Spreader is one of its important advantages. The low box does away with high pitching, the hard part of loading; it saves work.

You can load and spread more loads in a day with a New John Deere with less effort and thus have more time for other duties because of its low, easy-loading box.

Two exclusive features have made it possible to build a spreader with a box that is low from the front to the rear. These features are:

The beater on the axle, which permits lowering the rear end of the box, because the axle is not underneath it. In accomplishing this desired result, it has not been necessary to reduce the height of the drive wheels, neither is it necessary to throw the manure over the drive wheels in loading. This beater-on-the-axle construction, combined with

The **Box-Roll Turn,** which permits short turning without cutting the front wheels under the box, gives you a box that is exceptionally low and easy to fill.

Don't forget, the New John Deere Spreader is the only spreader built that has the beater on the axle and the box-roll turn. Both are exclusive features which are of real value to you.

Easier Pulling for Your Horses

The New John Deere has high wheels which give it the same light-draft advantage over other spreaders that the high-wheel wagon has over the low-wheel truck.

The high wheels are a mighty important draft-reducing advantage when you consider that about 75 per cent of the draft of a spreader is in hauling the load—only 25 per cent of the power is used in actually spreading.

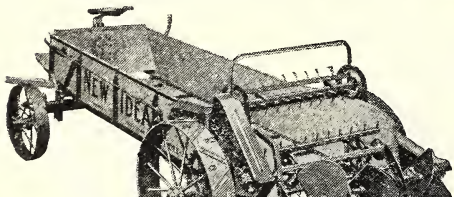
Roller-bearing equipment at both ends of all three beaters reduces draft and wear at these important points.

A tapered box—wider at the rear—does away with friction between manure and box sides as the load moves toward the beaters.

The beater on the axle saves one drive chain, one beater shaft and bearings, thus reducing the number of friction points and further reducing draft.

SEND FOR SPECIAL CATALOGUE

THE NEW IDEA MANURE SPREADER (Model 8)



The Model 8 NEW IDEA Spreader is the latest development of the original "wide-spreading" spreader, which was invented by the founder of the New Idea Spreader Company.

It is built to do the work that a spreader ought to do. The materials are the finest obtainable; the workmanship is accurate and painstaking. Here is a spreader big enough for the biggest farm yet so easy to pull that it can be handled by two horses, under most farming conditions. It will stand up under the hardest service and will last a lifetime. It is built by a company that knows how. It will never be an orphan.

Steel—The steel used in the frame of the Model 8 is of the same quality as that used for car rails. New Idea steel is specially rolled and is still stronger, finer in grain, tougher in fibre and more enduring. Government tests show that it is nearly three times as strong as the structural steel generally used for farm machines.

The shields, distributor blades and other flat metal parts are of copper bearing steel, resistant to rust and the acids of manure, and will wear longer and are more durable than the ordinary sheet steel generally used.

Wood—The bed of the Model 8 is built of the very finest grade of yellow pine, free from knots and checks. New Idea lumber is graded on both sides, while even the finest interior-finish lumber is graded on one side only

Castings—The few simple castings used on the Model 8 are of semi-steel, lighter in weight and much stronger and more durable than common castings. The simple design and the use of high-strength, light-weight materials is one of the chief reasons for the low cost of operating this machine.

Riveted Frame—The entire framework is riveted throughout and is in turn riveted to the body of the machine. There are no bolts to work loose and fall out, and the body cannot warp or fall apart after a few months' use.

Tight-Box—Tapered Body—The body of the machine is built of tongue-and-groove boards, each of which is painted before being joined. The box is 1½ inches wider in the rear than in front, thus reducing the friction and permitting the load to move easily to the rear. The machine is narrow enough to be driven into the barn when it is to be loaded directly from the stalls. The slip tongue is easily removed or replaced and eliminates lashing and side whipping.

All-Steel Beaters—The cylinders of the Model 8 are strongly built, properly timed and correctly adjusted to pulverize thoroughly and move the load with the least effort.

The diamond-pointed steel teeth are inserted through one leg of the angle steel bar and firmly riveted to the other leg. The teeth may be quickly and easily replaced.

The bottom—The bottom is built of ship-lap boards of very fine-grained yellow pine. Each board is riveted to steel cross sills. After it is assembled the entire bottom receives an additional heavy coat of paint. The bottom of the Model 8 cannot warp or work loose.

The Wheels—The wide, heavy rims of the New Idea wheels are electically welded and the spokes are hot riveted, headed both on the inside and outside of the rim. The hubs of semi-steel are bored and reamed their entire length, making smooth running, correctly aligned wheels. The wide drive wheels are equipped with heavy channel-steel cleats and center lugs that guarantee perfect traction, prevent skidding and permit the machine to be used on soft or sloping ground and under other unusual conditions.

The Conveyor—An endless conveyor of specially designed, heat-treated steel links runs over the tight bottom of the Model 8. The joints of the conveyor chain are rust-proof and always remain flexible and free-running even in the coldest weather. Angle steel bars mounted on the chain at regular intervals move the load back and keep the bottom cleaned. Tighteners are provided and strippers on the feed shaft keep the chain from wrapping.

Capacity—The Model 8 is a two-horse spreader with three-horse capacity. The load may be varied from 50 to 70 bushels depending on the height of loading. Two horses can handle it easily under most farming conditions. A three-horse hitch may be had, if desired, at a small additional cost.

Low-Down-Easy to Load—The Model 8 is low down and easy to load. The sides are only 39½ inches from the ground and the space between the wheels is free from obstructions that might interfere with loading.

High Clearance—While the bed is unusually low, the space under it is exceptionally high, leaving a clearance of 16 inches. This makes it possible to use the machine on rough ground and high stubble—a feature that should be carefully considered in buying a low down spreader.

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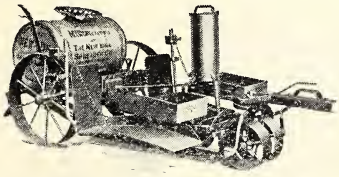
THE NEW IDEA TRANSPLANTER



The New Idea Transplanter may be used for setting all kinds of plants that may be transplanted. This includes tobacco, tomatoes, cabbage, peppers, sweet potatoes and other truck crops; strawberries, small bush fruits, small trees, and all nursery stock.

The plant setters are located on comfortable seats in front of the driver who can thus supervise their work and regulate the speed of the machine according to their ability.

Each plant is set deep and at a uniform depth. The spacing is uniform and may be varied as desired. Each plant is watered at the time of setting; the water is deposited on the roots and at the bottom of the furrow. The soil is packed firmly and with uniform pressure about the roots and stems and the dry surface soil is brought close about the stem to form a mulch.

Resetting is seldom necessary, as the loss seldom runs over 2%. Plants begin to grow at once. Crops mature from 10 days to two weeks earlier than when set by other methods, thus giving them the advantage of an earlier market and higher prices. Production is improved in quality and increased in quantity. Growers claim that the increase in production alone resulting from setting with the New Idea will more than equal the cost of the machine in a single season, even when not more than three acres are planted.

A driver and two plant setters can set from three to eight or more acres per day with the New Idea, doing as much work as 15 or 20 skilled plant setters working for the same length of time, and doing it better.

If you want to get better crops, get more to the acre and get better prices for your products, it will pay you to investigate the New Idea Transplanter.

THE FULLER & JOHNSON STEEL FRAME BEMIS TRANSPLANTER

The machine can be thrown in and out of gear, greatly increasing its life. A ratchet clutch throws the mechanism out of gear when backing, saving water and avoiding breakage.

A strainer in the barrel prevents the valve from becoming clogged and the obstruction of free flow of water.

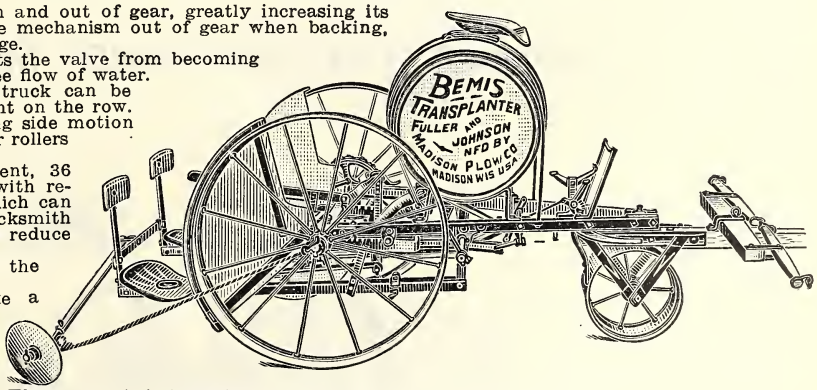
When in operation the front truck can be locked so machine will run straight on the row. This does away with the wobbling side motion experienced where swivel or castor rollers are used.

The wheels are our own patent, 36 inches high, very strong, made with replaceable boxings and spokes, which can be easily replaced by any blacksmith in case of breakage. Wide tires reduce draft.

The droppers do not get off at the end of the row.

The tongue is joined like a wagon, so there is no weight on the necks of the horses.

The entire machine is simple and very strong so that with proper care it will last for years.



The grower is independent of labor and free from a lame back.

SEND FOR SPECIAL CATALOGUE

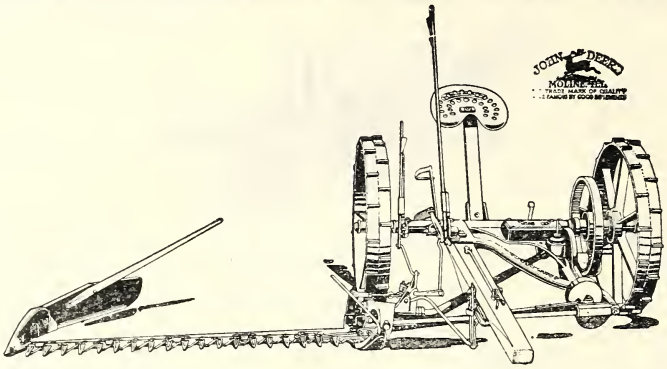
This machine has revolutionized tobacco setting, as there are now practically no large tobacco growers in the United States who set their plants by hand. It is also extensively used by market gardeners, nurserymen, etc. The supply of water can be regulated as conditions require.

We make a special potato planting attachment, and an extra-large shoe for setting nursery stock. We also make an attachment for sowing fertilizer in the trench with the plants and check-rower attachment for use where cross-cultivation is desired. For planting on ridges we can furnish the machine with two-wheel front truck to straddle the ridge and adjustable axles to raise the machine to conform to the height of the ridge. These axles provide for a variation of 5 inches in height of the machine.

The essential features of a transplanting machine, including the floating shoe, pressure plates, etc., are covered by our patents, and the working parts of our machine are so perfect that it is acknowledged by growers in all sections of this country, and in many foreign countries, that the Fuller & Johnson Bemis Transplanter is the best. The plants can be set when they are ready, no matter how dry the ground. In hand setting plants are often set when too small or when too large, as they must be set when the weather is suitable. As there need be no delay in planting on account of dry weather, the ground can be carefully prepared just before planting so as to kill all the weeds. The planting is equal to once cultivating, as the machine stirs the ground in the row, killing the weeds. The roots are not doubled up, and the plants start better. Even pressure is obtained on uneven ground by means of the floating shoe and pressure plates, which are independent of the shoe and of each other. This is the only successful device for this purpose used on a transplanter, and is covered by our patents. Spring pressure can also be applied from the lifting lever if desired. The earth is pressed about the plants by means of the hardened polished steel plates. The shoe is also made of hardened steel and finely polished. Price, **$110.00.**

Be sure the tomato plants are the "Wisdom" (See page 23)

JOHN DEERE HIGH-LIFT MOWER



When you get on the seat of the John Deere Mower the first outstanding feature you will notice is its high, easy lift with either foot or hand lever. You will appreciate the quickness and ease with which every field condition can be quickly met.

When you opearte the John Deere a few rounds you will notice the riding comfort, the perfect balance of the machine, the instant starting of the knife in the heaviest hay and the clean job of cutting.

Its durable and simple construction; the ease with which adjustments can be made to keep it in good running order; the ease with which repairs can be made—these qualities too, built into this light-draft, high-lift mower, will prove your good judgment in your selection.

John Deere Mower Built in Three Types

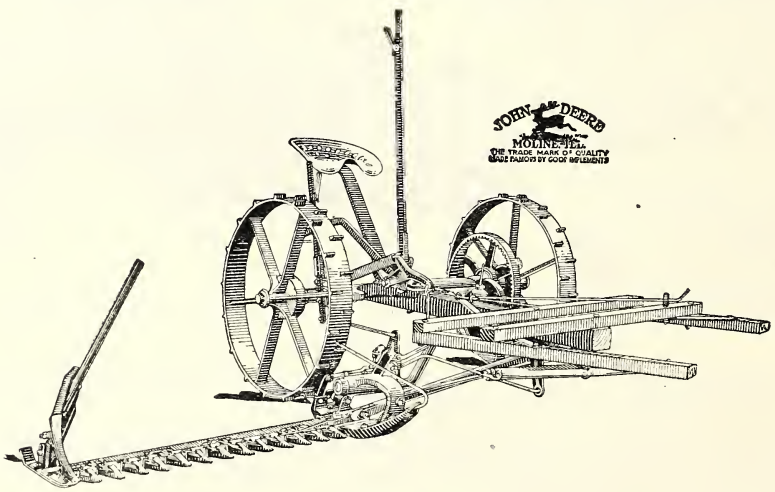
The superior features apply to the No. 1 regular, No. 2 big frame and the one-horse mowers. The No. 1 regular frame takes 3½-, 4½- or 5-foot cutter bar. All sizes from 3½ to 7 feet are used with the No. 2 big frame John Deere. The one-horse takes a 3½- and 4-foot bar.

PRICES:

4½	ft. John Deere Mower	**$85.00**
5	ft. John Deere Mower	**85.00**
6	ft. John Deere Heavy Duty Mower	**96.00**
7	ft. John Deere Heavy Duty Mower	**98.00**

We Can Furnish Tractor Hitch for Heavy Duty Mower

JOHN DEERE ONE-HORSE MOWER



The John Deere High-Lift One-Horse Mower is the same as the two-horse machine, except for its lighter construction, which fits it for one-horse work.

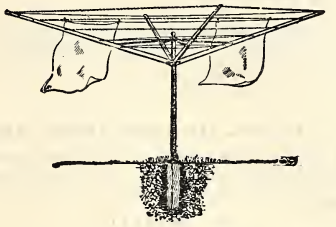
It has the high, easy lift, the balanced drive gears, the quickly- and easily-made field adjustments, flexibility of the cutter bar; in fact, all of the features that have made the John Deere two-horse machine a favorite on thousands of farms.

The quickness and ease with which the cutter bar can be raised to get great clearance has made the John Deere a most satisfactory mower for use on rough, stony land.

It is furnished regularly with shafts, and can be equipped with either a 3½- or 4-foot cutter bar.

For the user who wants a good-working, light-draft, easily-operated one-horse mower, the John Deere High-Lift will give real satisfaction.

SIZES: 3½- and 4-foot. **PRICE: $82.50**



CLAY

LAWN CLOTHES DRIER

Does away with overlifting and overreaching which makes the work of washday hard and a menace to health.

The Clay Lawn Clothes Drier is the one, safe, easy way of hanging out the wash.

It saves time, work and worry. Dries washing spotlessly clean. Folds like an umbrella to store away. All metal parts rust proof. Drier light in weight and easy to handle.

Sold with a positive guarantee of satisfaction or money refunded. A proven success.

Eight Points of Excellence

1—135 feet high grade sea-island cotton line.
2—You can hang the wash without a step or lift.
3—Tension of line adjusted as easy as raising an umbrella.
4—Drier folds up and is removable; line always clean and yard clear.
5—Requires open space only 15 feet in diameter.
6—Exceptionally strong and durable.
7—Weighs only 37 lbs., about half the weight of a basket of wet clothes.
8—It eliminates clumsy props, sagging lines and soiled clothes.

Price $15.00

STANDARD HAND SEPARATOR OIL

(Light Yellow in Color)

1 Gallon

Standard Hand Separator Oil is a high-grade lubricant especially adapted for use on cream separators. It will not gum, rust or corrode the bearings.

It feeds freely into the closest bearings and insures the perfect lubrication that is essential to the free spinning of the bowl and the complete separation of cream from milk. It lessens the driving effort and lengthens the life of the separator.

Put up in quart, half-gallon, one-gallon and five-gallon lithographed cans; also in half-barrels and barrels.

1-qt. can.....**$0.40**
½-gal. can..... **.65**
1-gal. can..... **1.00**

TRANSMISSION OIL

For use in transmission or gear cases, where a heavy bodied oil is required. It is a dark oil of highly efficient lubricating and long lasting qualities.

1-gallon cans.....**$1.15**
5-gallon cans..... **5.00**

MICA AXLE GREASE

25-Pound Pail

Mica Axle Grease is the best that skill and science can produce. It is made of the best grease stock and ground mica, which fills up the pores and crevices in the axle and forms a hard, bright, smooth coating, thus reducing friction to the minimum. Mica Axle Grease never wears off, and it leaves no gum or paste on the spindles.

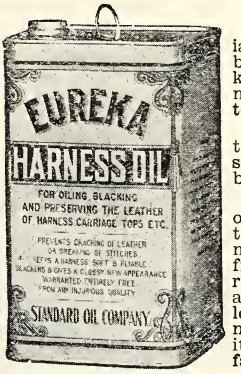
Mica Axle Grease is the most popular axle grease on the market, because it saves horsepower, saves harness repairs, saves wear and tear on wagons.

Mica Axle Grease can be supplied in one and three-pound lithographed tins, ten, fifteen and twenty-five-pound galvanized iron pails, fifty and 100-pound kegs and in half-barrels and barrels.

1-lb. box.....**$0.15**
15-lb. bucket..... **1.50**
25-lb. bucket..... **2.50**

EUREKA HARNESS OIL

(Very Dark Blue)



1 Gallon

Eureka Harness Oil is specially manufactured for oiling, blacking and preserving all kinds of leather, especially harness, automobile and carriage tops, etc.

All harness needs a preservative. To neglect it means that sooner or later it will crack and break.

In Eureka Harness Oil we offer the best harness oil obtainable. It is superior to all neatsfoot oils, because it is free from acids and will not become rancid. It penetrates the leather and prevents the cracking of leather and breaking of stitches; makes leather water-proof, and it lasts much longer and goes farther than any other oil

1-gal. can.....**$1.25**

THRESHER HARD OIL

5 Pounds

A lubricant adapted for general use on crank pins, shafting, loose pulleys, valve motions, eccentrics, slides, main journals, etc. For use in spring or compression cups or in open boxes.

Made in different consistencies, varying from No. 0, which is very soft, to No. 5, which is very hard, the intermediate grades being Nos. 1, 2, 3, 3½ and 4.

Put up in one, five, ten, twenty-five and fifty-pound lithographed tins; also in half-barrels and barrels.

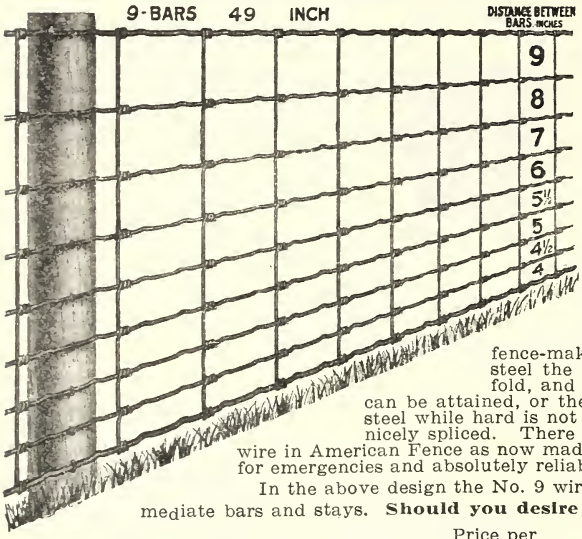
1-lb. can.....**$0.25**
5-lb. can..... **1.00**
10-lb. can..... **1.80**
25-lb. can..... **4.50**

COMPOUND NEAT'S-FOOT OIL

This is a combination of Neat's-Foot and Mineral oils in right proportions and properly compounded to prevent the Animal Oil from becoming rancid, thus producing a combination that will greatly improve Harness or any leather where this oil is used.

1-gallon cans.....**$1.50**

AMERICAN FARM FENCE



Made of large, strong, high-grade steel wire, heavily galvanized. Amply provides for expansion and contraction. Is practically everlasting. Never goes wrong, no matter how great a strain is put upon it. Does not mutilate nor injure stock.

TURNS CATTLE, HORSES, HOGS AND PIGS

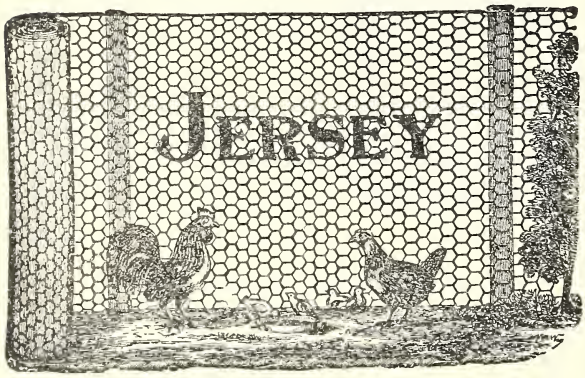
Every Rod Guaranteed by us and guaranteed by the manufacturers. Call and see it. We can show you how it will save you money and fence your fields so they will **stay fenced.**

MATERIAL

Hard, Stiff Steel—The development of American Fence, the years of experiment and hundreds of thousands of dollars that have been put into the work of perfecting machinery and producing the grade of special steel that makes American Fence what it is today would be a long story. Suffice it to state that about one year ago we succeeded in producing a composition in steel that for fence-making is simply par excellence. By the use of this special steel the value of American Fence to the user is increased many fold, and we firmly believe it to be as near absolute perfection as can be attained, or the necessities of the case demand. Wire drawn from this steel while hard is not brittle. It is stiff and springy, but pliable enough to be nicely spliced. There is such a distinction as live steel and dead steel. Every wire in American Fence as now made is a live wire, doing business all the time, always ready for emergencies and absolutely reliable.

In the above design the No. 9 wire is used for top and bottom bars, No. 11 wire for intermediate bars and stays. **Should you desire any other style Fence, write for booklet.**

Design.	Bars.	Height.	Stays.	Price per Rod.
726	7	26-inch	6-inch	**$0.50**
726	7	26-inch	12-inch	**.38**
635	6	35-inch	12-inch	**.36**
845	8	45-inch	12-inch	**$0.47**
949	9	49-inch	12-inch	**.55**



DIAMOND MESH POULTRY NETTING

The wire we offer is No. 20 Double-Twist 2-inch Mesh, thoroughly galvanized. Sold in bales of 150 running feet.

(Galv. After Weaving.) No.	Ins. Wide.	Sq. Feet.	List Price, Per Bale.	Retail Price, Per Bale.
20	12	150	**$ 2.14**	**$1.35**
20	18	225	**3.08**	**1.90**
20	24	300	**3.92**	**2.45**
20	36	450	**5.35**	**3.30**
20	48	600	**7.13**	**4.40**
20	60	750	**8.91**	**5.50**
20	72	900	**10.69**	**6.60**

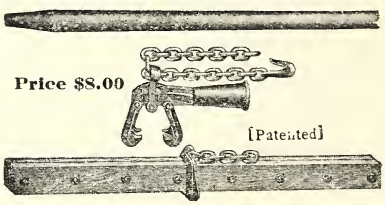
Price, **1½c** per square foot in less than bale lots. Staples for fastening, **10c** per pound.

One-Inch Mesh.

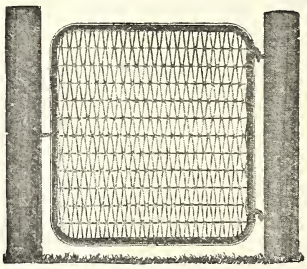
(Galv. After Weaving.) No.	Ins. Wide.	Sq. Feet.	List Price, Per Bale.	Retail Price, Per Bale.
20	12	150	**$ 4.95**	**$ 3.05**
20	18	225	**7.12**	**4.40**
20	24	300	**9.08**	**5.60**
20	36	450	**12.38**	**7.65**
20	48	600	**16.50**	**10.20**

THE LOTT STRETCHER

The simplest cheapest and most efficient tool ever gotten out for stretching fence. It is strong enough to stretch from 10 rods to a mile of fence at a time. Anybody can operate it.



POST-HOLE DIGGER—(See Index.)
TOWNSEND WIRE STRETCHER—$1.50.



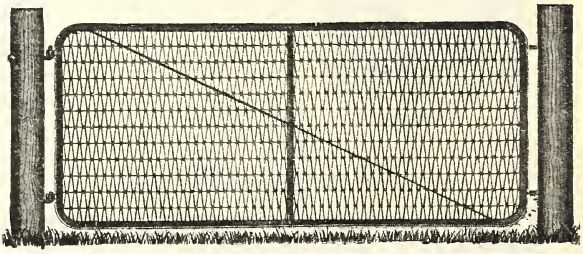
WIRE STAPLES—Broad and narrow.

BARB AND RIBBON WIRE—Price on application.

AMERICAN WALK GATE

3 feet by 50 inches, **$4.00.**
3 feet by 58 inches, **$4.25.**
3½ feet by 50 inches, **$4.50.**
3½ feet by 58 inches, **$4.75.**

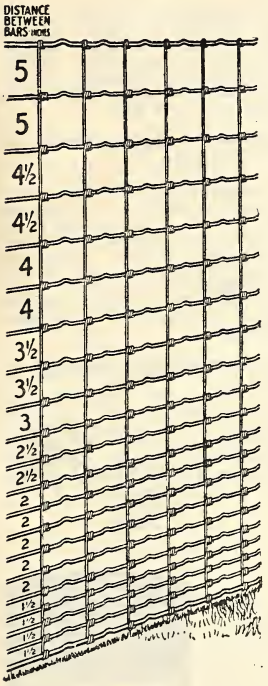
AMERICAN SINGLE DRIVE GATE



10 feet by 48 inches..... **$9.00**
12 feet by 48 inches..... **10.25**
14 feet by 48 inches..... **11.25**

Prices on Other Size Walk, Single-Drive Gates Furnished on Application

AMERICAN POULTRY, GARDEN AND RABBIT FENCE

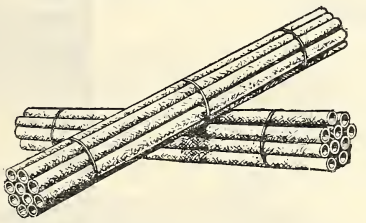


Top or bottom boards not required with this Poultry Fence on account of the close spacing between bottom line wires. An ideal chicken and rabbit-proof fence. Can be stretched like a field fence. Made in three sizes, 35 inches, 48 inches and 58 inches high. Stay wires 6 inches apart. Furnished in 10 and 20 rod rolls.

Top and bottom wire No. 11. Intermediate and stay wires, No. 14½.

No.	Bars	Height	Price Per Rod
2158	21	58 in.	**75c**
1948	19	48 in.	**72c**
1635	16	35 in.	**68c**

AMERICAN GALVANIZED FENCE POSTS



The use of Steel fence posts has become so general during recent years that there is no longer any question but what they are the only solution of the fence post problem.

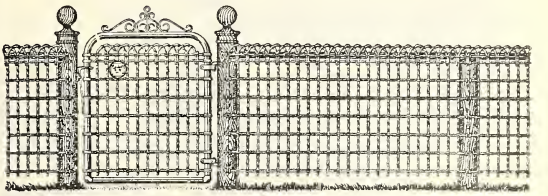
The American Galvanized Fence Post is stronger, heavier—bigger and better in every way. The galvanizing is done after the post is formed, insuring a heavy protective covering inside and out, with an extra heavy coat below the ground line.

Packed 10 to a bundle for shipping.

Price

	Line Post	End Post	Corner Post
6 feet	**$ .70**	.....	.....
6½ feet	**.74**	.....	.....
7 feet	**.80**	**$4.25**	**$6.30**
7½ feet	**.85**	.....	.....
8 feet	**.95**	**6.80**	**6.80**
Driving Caps for Line Post			**.54**
Ornamental Top for Line Post			**.27**
Ornamental Top for Corner End Post			**.30**

CYCLONE LAWN FENCE AND GATES



The extra-deep crimp of the picket wires forms an absolute lock for the cables, preventing their being pushed up or down on the pickets.

Horizontal cable wires are twisted with a triple twist between pickets. The cable twist is reversed on the pickets instead of between them, forming an absolute lock on the pickets. Cyclone Fence cannot sag; the cables with reverse twists make proper allowance for contraction and expansion of wire due to atmospheric changes.

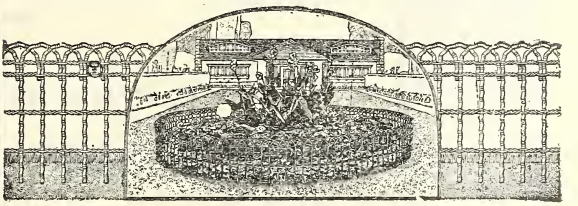
Cyclone Fabrics are adjustable to any uneven ground. Each cable wire is stretched to the proper tension independently of the others so the pickets will always stand in an upright position.

Every roll of Cyclone Fence passes rigid inspection and must conform to our high standard of perfection. Any one can easily erect Cyclone Ornamental Lawn Fence without any previous experience. With ordinary wood posts and 2x4 top rail, a very attractive, substantial, permanent fence is secured at a surprisingly low cost.

36 inches high—per foot..... **11c**
42 inches high—per foot..... **12c**
48 inches high—per foot..... **14c**

Owing to limited space in this catalogue and to the many sizes of gates we are unable to give prices only upon application.

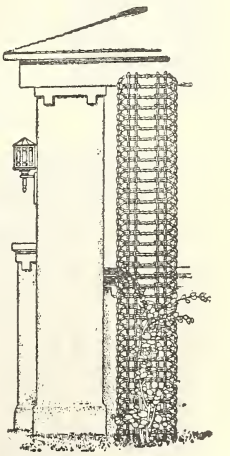
CYCLONE FLOWER BED GUARD



Made in two sizes, 18 and 22 inches. Requires no posts. Cut any length to fit any flower bed or border.

18 inches high—per foot..... **10c**
22 inches high—per foot..... **12c**

CYCLONE TRELLIS



Adds to the beauty of any home, very attractive in appearance. Made of very heavy galvanized wire neatly woven in such a way as to make a strong and durable support for the heaviest growth of vine.

18 inches wide. Cut to any desired length.

10c per foot

ROOFING, CEMENT AND PAINTS

Certain-teed Asphalt Roof Coating.

The life of composition roofing can be renewed and greatly prolonged by the use of this coating. A good roofing coated with Certain-teed every two or three years will last indefinitely. Price, **1 gal. 90c; 5 gals. $3.25; ½ bbl. 55c per gal; bbls. 44c per gal.**

Certain-teed Asbestos Roof Coating

Forms a durable weather-and-water proof surface for metal, concrete or other roofs. Also may be used on asphalt composition roofs and for general weather-proofing purposes, such as water-proofing foundations, etc. This is strictly an asphalt product. It contains no coal tar. Price: **1 gal. $1.00; 5 gals. $4.00; ½ bbl. 75c per gal.; bbls. 58c per gal.**

Certain-teed Plastic Cement

A durable, permanent, weatherproof and waterproof composition of semi-hard consistency for repairing leaks in metal, shingle or composition roofs, for stopping holes in gutters, flashings, water troughs, etc., and for general weather-proofing purposes. Made of the best materials obtainable. Price:

1 lb. package	**$0.20**	50 lb. package	**$5.00**
10 lb. package	**1.25**	½ bbl., 275 lbs	**15.00**
25 lb. package	**2.75**	Bbls., 450 lbs.,	**23.00**

THE GUARD ROOFING

The Guard Roofing is a very good grade of roofing, but, of course, cannot be compared with the Certain-Teed for durability. However, where a temporary roofing is desired it is just the thing. If weather conditions are not too severe it will last four or five years. It is fire-resisting, pliable and easy to put on in either cold or warm weather. The materials used in the manufacture of Guard Roofing has been selected with the best of care. Put up in rolls 36 inches wide, containing 108 square feet. Nails and cement packed on inside.

Prices:

1-ply	**$1.30**
2-ply	**1.70**
3-ply	**2.00**

CERTAIN-TEED ROOFING

When you want a smooth-surfaced roofing for your house, barn, garage, factory, warehouse, skyscraper, church, apartment building or farm building, get **CERTAIN-TEED**—guaranteed 5, 10 or 15 years for 1, 2 or 3-ply, respectively—baeked by the responsibility of the world's greatest and biggest roofing and building paper mills. The **Certain-teed** label on this roofing stand for a definite guaranteed service—a protection for you. Why try to save a dollar or two by putting on a cheap roof that is not guaranteed, when you can buy **Certain-teed** for just a little more money and get much longer service on your roof. In the long run it's less expensive to buy **Certain-teed.**

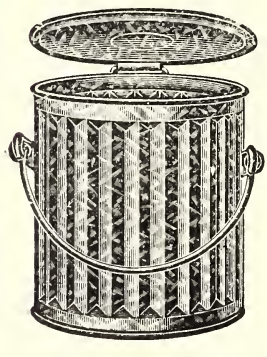
Prices:

1-ply, 108 square feet	**$1.35**
2-ply, 108 square feet	**1.75**
3-ply, 108 square feet	**2.40**

PAINTS AND VARNISHES

We carry a full line of **Certain-Teed** Paints and Varnishes for the rural and suburban trade. We specialize on barn and house paints of best quality, and our prices are as low as a quality paint can be sold. Write for details and prices.

CANS



GARBAGE CANS

(Galvanized.)

No	Capacity, Gallons.	Price.
425	4	**$2.50**
435	6½	**3.00**
445	9¾	**3.40**

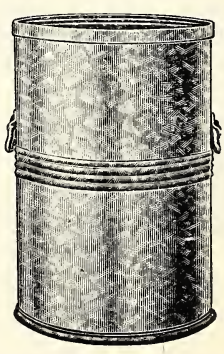
MONITOR ASH CANS

(Made of Heavy Galvanized Tin.)

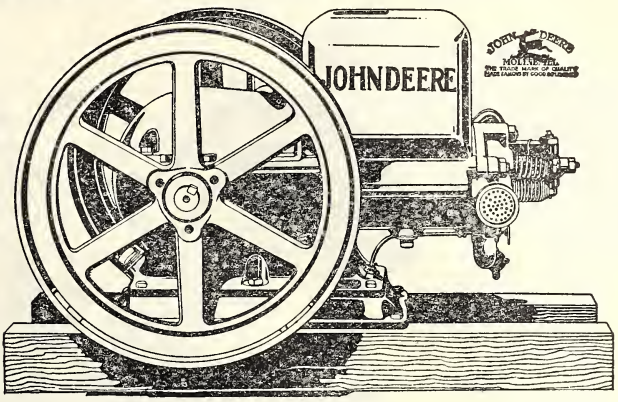
No.	Capacity, Gallons.	Price.
2½	11¾	**$4.00**
3	17	**4.75**
4	22	**5.00**
5	24¾	**5.75**

Covers are not included in price

Covers for Cans—2½, 70c; 3 ,90c; 4, $1.10; 5, $1.25.



THE ENCLOSED ENGINE THAT OILS ITSELF



The John Deere farm engine is far ahead of its field in design and construction—it places the farm engine on a plane with other types of modern power machinery.

Users say, "John Deere is the greatest advancement ever made in farm engine building." It is a fact that no other farm engine has ever been designed with so many distinctive advantages

The complete enclosure of its operating parts and its automatic oiling system, while outstanding features, are but two of the many improvements that make it a profitable investment for every farmer.

Take the time to read the following facts about this farm engine. You will recognize at once the reasons for its great success.

All Vital Parts Completely Enclosed

All the important parts—crankshaft bearings, connecting rod bearings, cylinder, governor, timing gears, etc.—are completely protected within a dust-proof housing.

There is no more opportunity for sand and other foreign matter to get into the vital parts of the John Deere than there is for such particles to get into the motor of your car.

Longer life, less repair expense and better service necessarily result from this advanced design.

Governor Accurately Controls Speed

The John Deere operates on the hit-and-miss principle. By merely turning a hand nut located on the outside of crank case, the speed of the engine can be varied from one-half normal speed to ten per cent above normal speed without stopping engine. The vital parts of the governor and the hook-up mechanism are hardened to resist wear. The governor is entirely enclosed within the dust-proof case and operates in a bath of oil.

Engine Operates Without Vibration

Smoothness of running is a feature that every user appreciates in the John Deere. Because the operating parts are carefully balanced, this engine runs without vibration at any speed.

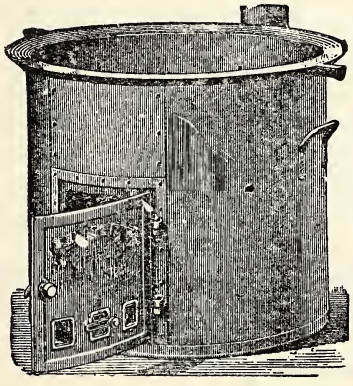
SIZES AND SPECIFICATIONS

John Deere Type E Engine Specifications

Rated H. P.	Normal Speed R.P.M.	Bore, Inches	Stroke, Inches	Standard Pulley Size, Inches Diameter, Face	Over-all Dimensions Length	Width	Height	Approximate Shipping Weight Lbs.	PRICE
1½	600	3½	4½	4¾x 4	33″	21″	20″	226	**$ 68.00**
3	550	4½	5½	6 x 5	39″	25″	23″	338	**105.00**
6	500	6	7	12 x 6	48″	33″	30″	698	**175.00**

WE CARRY A FULL LINE OF HERCULES ENGINES AND REPAIRS.

FOOD COOKER AND BOILER



These are used for cooking food, rendering lard, scalding hogs, poultry, making soap; very useful for boiling spray mixtures. Heavy, cold-rolled steel furnace, extra large feed door, wrought iron handles, firmly riveted on furnace; kettles smooth and made of heavy cast iron, never buckling or warping from heat. Made to set on ground or brick foundation.

Prices

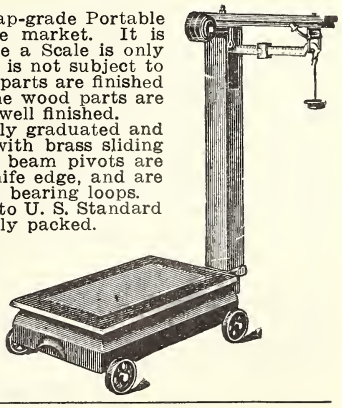
No. 1—24-gal	**$19.50**	No. 3—50-gal	**$24.00**
No. 2—36-gal	**21.50**	No. 4—60-gal	**26.50**

SIMPLEX PLATFORM SCALE

This is the best cheap-grade Portable Platform Scale on the market. It is intended for use where a Scale is only used occasionally, and is not subject to hard usage. The iron parts are finished in black japan, and the wood parts are painted blue, and are well finished.

The beam is carefully graduated and made of solid brass, with brass sliding poise. The lever and beam pivots are of steel drawn to a knife edge, and are supported in hardened bearing loops.

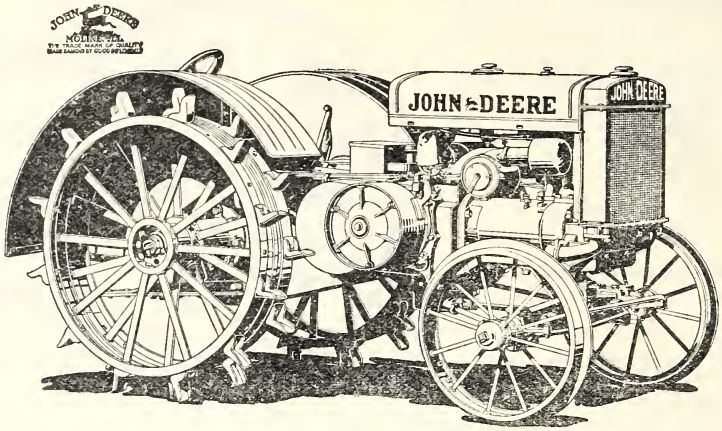
Each Scale is sealed to U. S. Standard weights, and is carefully packed.



No. Capacity. Price.

1128—500 lbs. **$22.00**
1124—1000 lbs. **26.00**

JOHN DEERE FARM TRACTOR



The John Deere Farm Tractor gives you all of the important features that go towards making power farming practical and profitable.

It has all-around farm adaptability; it has ample power to operate drawbar and belt machines of economical size; it is extremely simple, easy to understand and operate; its fewer but sturdier parts are fully enclosed and operate in oil—built for long life; it is easy to get at all parts and easy to make adjustments or repairs; its operating and maintenance costs are surprisingly low. This tractor carries the John Deere name which means uniformly high quality to all who are familiar with John Deere products.

Has the Farm Adaptability You Need

Adaptability to farm use is one of the important points to consider in selecting your farm tractor.

The John Deere is built for all-around farm use. It is very compact in design—63 inches wide, very little wider than the tread of your wagon; only 56 inches high, about 1½ feet; 109 inches long, 1½ feet shorter than the box on your farm wagon. It has a turning radius of only 12 feet—works well in fields and orchards—can be used effectively in crampted quarters.

Its light weight is a big advantage in working plowed land, wet fields and land that tends to pack.

It is ideally balanced for field work—this, combined with the efficiency of the special spade lugs, insures unusual traction and remarkable ability to climb hills. Its low center of gravity helps to prevent sluing on side hills and eliminates the possibility of upsetting.

The John Deere can be attached to and will operate any standard field machine within its power range; the drawbar has an adjustment of 8¼ inches up and down and 34 inches sideways.

The front axle is flexible—either front wheel can rise or lower 24 inches—a big advantage in working rough land, or where irrigation ditches must be crossed.

The low, strong, roomy platform, just a step from the ground, provides plenty of space for the operator to change position for his comfort. The easy riding spring seat is strongly mounted. Wide fenders, wider than before, protect the operator from possible injury and from excessive dust and dirt.

The John Deere is surprisingly easy to steer. All controls are easily handled from the seat.

The operator gets an unobstructed view of the furrow wall ahead from the seat. The belt pulley is ideally located on the right hand side for greatest convenience in lining up the belt and permits the use of a crossed belt.

The operation of the John Deere in the field and with belt machinery is so simple and so easy that many farm boys hardly old enough to drive a team are operating John Deere Tractors.

Plenty of Power to Operate Machines of Economical Size

The ability of the John Deere to outdo what is normally expected of a tractor of its size has been an outstanding feature. Now, with more power than before, its performance at the drawbar and on the belt is even more astonishing. Think of a tractor weighing less than 4200 lbs, that will pull three 14" stubble bottoms under difficult conditions and four bottoms under many conditions! This tractor will operate a 28" separator successfully under normal conditions and other power machinery requiring power in proportion!

The John Deere Tractor of today will develop from 5 to 6 H.P. more than the 1927 model.

The great power at the drawbar is due primarily to these important features of design and construction: (1) The power is transmitted from engine to drawbar in a straight line through straight spur gears mounted on roller and ball bearings which are held in permanent alignment in a rigid one piece case—the power is not carried around corners; (2) final drive is through two hardened steel roller chains completely enclosed; (3) all parts are completely enclosed in a dust and dirt proof case and operate in oil.

On the belt maximum power of the engine is transmitted to the pulley. The pulley is mounted directly on the crank shaft. There is no loss of power as a result of driving the pulley through gears.

The increase in power of the present John Deere Tractor as compared with the 1927 model results from increasing the bore of the cylinders and using a new carburetor of improved and more efficient design.

But remember this increase in power has been accomplished without sacrificing its light weight advantages.

This Simplicity Means Much to You

Other things being equal, you know that the simplest machine is the most satisfactory. It is easier to understand, easier to operate and lasts longer. **The John Deere is the tractor of fewer but sturdier parts**—hundreds of parts simpler than other tractors of similar rating. This reduction in number of moving parts means a corresponding reduction in the number of points of contact, possible sources of friction, wear and loss of power.

Remember, not only fewer, but sturdier parts.

Working Parts Fully Enclosed and Oiled Automatically

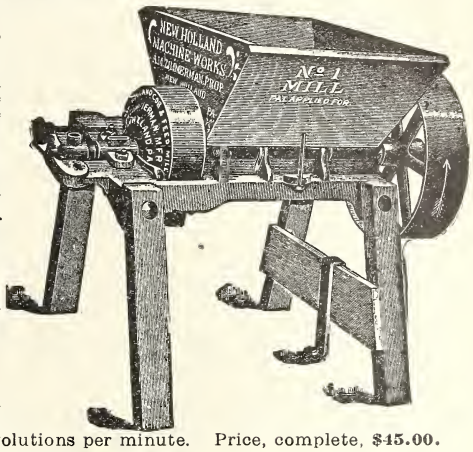
Here is another important feature that you will be sure to appreciate. Besides providing rigid support for all bearings, shafts and gears, the sturdy one-piece frame with two covers completely encloses the entire working mechanism. It fully protects all parts from dust, sand or other foreign matter.

SEND FOR SPECIAL CATALOGUE

MADE IN (2) TWO SIZES—10-27 and 15-27

Plant the "Wisdom" Tomato (See page 23)

NEW HOLLAND GRINDING MILLS FOR EAR CORN OR SHELLED GRAIN



These very popular and ecxellent working mills have a decided point in their favor, and that is that while doing excellent and fast work, they are slow-speed machines, a factor for reducing friction, and operate with less power than any other mill we know of. By a peculiar construction the ears are not crushed by main force as in other mills. The lugs of the cob grinders are placed spirally on the shaft, so that not more than 1 or 2 will catch the ears of corn at one time, and, being short, they pierce and break out pieces of the ear, and thus gradually reduce it. Having large pulleys and no extra shafts, belts, chain or cog gearing, the draft is made the lightest possible. Simplicity and durability are the keynotes in the construction of these mills. The frame is in one casting, and there is only one shaft; the cob grinders and grinding plates are all on this shaft. The material is of extra quality, and there are a number of little features about the mill which all go toward making it very durable and long-lived. The grinding plates are made of the hardest suitable metal.

No. 6½ NEW HOLLAND MILL

This mill may be operated with any light power, from 2 to 6 horsepower. The speed should be from 200 to 600 revolutions per minute, according to power. Light powers require lower speeds. Capacity, 6 to 30 bushels per hour. Price, complete, **$37.50.**

No. 10 NEW HOLLAND MILL

Similar to the No. 6½, but is heavier, larger and has much greater capacity. It is suitable for any power, from 6 to 12 horse, and will grind from 20 to 60 bushels per hour. Speed required, 200 to 600 revolutions per minute. Price, complete, **$45.00.**

ADVANTAGES IN CORN AND COB MEAL

The man with a good grinder has another decided advantage besides that of being able to feed ground grain instead of whole grain. He can increase the bulk of the corn he feeds from one-fifth to one-fourth by grinding cobs and corn together, making corn and cob meal. Hence he has more feed per acre of corn, and a feed upon which the stock will thrive better than on corn meal alone. Practical experiences of feeders all over the country and tests at Experiment Stations prove that better gains are made and less digestive troubles experienced when animals get corn and cob meal than when they get the corn meal only.

Corn meal is so heavy and condensed that when fed alone it lies in the digestive tract in too solid a mass for the digestive juices to thoroughly permeate it. Grinding the cob with the corn lightens the meal, makes it porous, prevents compaction in the stomach and alimentary canal and allows the digestive juices to go freely through the entire quantity.

Not only does the cob meal, when ground and fed with the corn meal, give valuable assistance to the process of digestion, but it contributes largely to the nutritive value of the feed as shown by analysis made at various State Experiment Colleges. General testimony seems to show that a pound of corn and cob meal has the same feeding value as a pound of pure corn meal.

MAKE BALING AN EASY, SPEEDY JOB

ECCENTRIC GEARS DISTINGUISH THE JOHN DEERE

More hay presses are being sold today than ever before. And that's a good sign. It means that farmers are recognizing more generally the economic importance of preserving the value of their hay.

The farmer of today is not leaving his $20-a-ton hay exposed to the weather out in the field if he can help it; neither is he wasting half of the space in his mow by storing his hay in bulk. The loss is too great in either case, and loss is what the farmer is trying his hardest to avoid.

Wherever it can be managed the thrifty farmer is baling his hay, not only the hay that he ships to market, but the hay he feeds to his stock as well. He finds in the long run that this is the most economical way to handle hay.

Advantages of Baling

Baling does not make good hay better, but it does preserve the goodness of good hay. Baled hay does not deteriorate if properly stored. Baled hay requires much less space for storage. It is ready for market when the price is right and there is no loss in handling when fed to the stock. It is easy to handle and easy to transport.

All of the hay offered at the big markets is baled. In this condition the hay can be shipped any distance, and the grower thus can avail himself of the high prices prevailing at distant markets.

The hay one finds at the markets as a rule represents the best hay produced in the country. That is because the American farmer who has hay to sell bales his best hay for market, and retains the poor hay for his own stock, feeding it, without baling, either from the stack or from the mow.

This is not sound economy where the farmer is feeding for production of meat and butterfat; but the situation is being helped by a system of making hay that produces a uniformly good product.

The man who buys a hay press, whether he be a commercial balerman or private farm owner, is making an investment which he expects to make pay him dividends. The press must be a dependable sure-fire, money-making piece of machinery to do that.

Automatic Self-Cleaning Tucker

The John Deere automatic self-cleaning tucker is the biggest single factor in producing neat, well-made bales. It has both vertical and swinging motion and also the correct shape for doing the most effective work. Given the proper tension by two adjustable coil springs, the blunt, tapering blade gathers in the hay and carefully folds it over into place exactly where it belongs, leaving no scraggly ends, no tails. It handles any charge no matter how heavy or how light.

Size	Approximate Weight	Strokes Per Minute	Flywheel Speed	Approximate Capacity Tons Per Hour
14 x 18	3740 lbs.*	19–25	600–775	1 ½ to 2 ½
16 x 18	3780 lbs.	19–25	600–775	1 ½ to 2 ½
18 x 22	4960 lbs.	19–25	600–775	3 to 4

*Engine extension weighs 216 lbs. extra.

SEND FOR SPECIAL CATALOGUE

All Prices Subject to Change Without Notice

We Deliver Free in the U.S. and possessions by Parcel Post or Express to Any Express Office at Our Option

All Vegetable and Flower Seeds by the Packet, Ounce and ¼ Pound

Purchasers Pay Transportations on ½ Pounds, Pints, Quarts, ½ Pecks, Bushels, and Barrels; Also on Farm Seeds, Tools, Implements, Requisites, Fertilizers and Insecticides.

If Wanted by Parcel Post, Add Postage as Noted for these

POSTAL WEIGHT ON BEANS, PEAS AND CORN, ONE POUND PER PINT

PARCEL POST RATES

Weight in pounds	Local	Zones							
		1st, up to 50 miles	2nd, 50 to 150 miles	3rd, 150 to 300 miles	4th, 300 to 600 miles	5th, 600 to 1,000 miles	6th, 1,000 to 1,400 miles	7th, 1,400 to 1,800 miles	8th, over 1,800 miles
1	$0.07	$0.07	$0.07	$0.08	$0.09	$0.10	$0.11	$0.13	$0 14
2	.08	.08	.08	.10	.13	.16	.19	.23	.26
3	.08	.09	.09	.12	.17	.22	.27	.33	.38
4	.09	.10	.10	.14	.21	.28	.35	.43	.50
5	.09	.11	.11	.16	.25	.34	.43	.53	.62
6	.10	.12	.12	.18	.29	.40	.51	.63	.74
7	.10	.13	.13	.20	.33	.46	.59	.73	.86
8	.11	.14	.14	.22	.37	.52	.67	.83	.98
9	.11	.15	.15	.24	.41	.58	.75	.93	1.10
10	.12	.16	.16	.26	.45	.64	83	1.03	1.22
11	.12	.17	.17	.28	.49	.70	.91	1.13	1.34
12	.13	.18	.18	.30	.53	.76	.99	1.23	1.46
13	.13	.19	.19	.32	.57	.82	1.07	1.33	1.58
14	.14	.20	.20	.34	.61	.88	1.15	1.43	1.70
15	.14	.21	.21	.36	.65	.94	1.23	1.53	1.82
16	.15	.22	.22	.38	.69	1.00	1.31	1.63	1.94
17	.15	.23	.23	.40	.73	1.06	1.39	1.73	2.06
18	.16	.24	.24	.42	.77	1.12	1.47	1.83	2.18
19	.16	.25	.25	.44	.81	1.18	1.55	1.93	2.30
20	.17	.26	.26	.46	.85	1.24	1.63	2.03	2.42
21	.17	.27	.27	.48	.89	1.30	1.71	2.13	2.54
22	.18	.28	.28	.50	.93	1.36	1.79	2.23	2.66
23	.18	.29	.29	.52	.97	1.42	1.87	2.33	2.78
24	.19	.30	.30	.54	1.01	1.48	1.95	2.43	2.90
25	.19	.31	.31	.56	1.05	1.54	2.03	2.53	3.02
26	.20	.32	.32	.58	1.09	1.60	2.11	2.63	3.14
27	.20	.33	.33	.60	1.13	1.66	2.19	2.73	3.26
28	.21	.34	.34	.62	1.17	1.72	2.27	2.83	3.38
29	.21	.35	.35	.64	1.21	1.78	2.35	2.93	3.50
30	.22	.36	.36	.66	1.25	1.84	2.43	3.03	3.62
31	.22	.37	.37	.68	1.29	1.90	2.51	3.13	3.74
32	.23	.38	.38	.70	1.33	1.96	2.59	3.23	3.86
33	.23	.39	.39	.72	1.37	2.02	2.67	3.33	3.98
34	.24	.40	.40	.74	1.41	2.08	2.75	3.43	4.10
35	.24	.41	.41	.76	1.45	2.14	2.83	3.53	4.22
36	.25	.42	.42	.78	1.49	2.20	2.91	3.63	4.34
37	.25	.43	.43	.80	1.53	2.26	2.99	3.73	4.46
38	.26	.44	.44	.82	1.57	2.32	3.07	3.83	4.58
39	.26	.45	.45	.84	1.61	2.38	3.15	3.93	4.70
40	.27	.46	.46	.86	1.65	2.44	3.23	4.03	4.82
41	.27	.47	.47	.88	1.69	2.50	3.31	4.13	4.94
42	.28	.48	.48	.90	1.73	2.56	3.39	4.23	5.06
43	.28	.49	.49	.92	1.77	2.62	3.47	4.33	5.18
44	.29	.50	.50	.94	1.81	2.68	3.55	4.43	5.30
45	.29	.51	.51	.96	1.85	2.74	3.63	4.53	5.42
46	.30	.52	.52	.98	1.89	2.80	3.71	4.63	5.54
47	.30	.53	.53	1.00	1.93	2.86	3.79	4.73	5.66
48	.31	.54	.54	1.02	1.97	2.92	3.87	4.83	5.78
49	.31	.55	.55	1.04	2.01	2.98	3.95	4.93	5.90
50	.32	.56	.56	1.06	2.05	3.04	4.03	5.03	6.02
51	.32	.57	.57	1.08					
52	.33	.58	.58	1.10					
53	.33	.59	.59	1.12					
54	.34	.60	.60	1.14					
55	.34	.61	.61	1.16					
56	.35	.62	.62	1.18					
57	.35	.63	.63	1.20					
58	.36	.64	.64	1.22					
59	.36	.65	.65	1.24					
60	.37	.66	.66	1.26					
61	.37	.67	.67	1.28					
62	.38	.68	.68	1.30					
63	.38	.69	.69	1.32					
64	.39	.70	.70	1.34					
65	.39	.71	.71	1.36					
66	.40	.72	.72	1.38					
67	.40	.73	.73	1.40					
68	.41	.74	.74	1.42					
69	.41	.75	.75	1.44					
70	.42	.76	.76	1.46					

INSECTICIDES CANNOT BE SENT BY PARCEL POST

WEIGHT OF AGRICULTURAL SEEDS, PER BUSHEL, AND QUANTITY USUALLY SOWN PER ACRE.

Weight per Bushel.		Pounds per Acre.
14 lbs.	Awnless Brome	35 to 40 lbs.
60 lbs.	Alsike, alone	6 lbs.
60 lbs.	Alfalfa or Lucerne	20 lbs.
48 lbs.	Barley, broadcast	2 bus.
.. lbs.	Broom Corn, in hills	6 to 8 qts.
48 lbs.	Buckwheat, broadcast	1 bus.
21 lbs.	Crested Dog's Tail	25 lbs
20 lbs.	Creeping Bent	50 lbs.
60 lbs.	Crimson Clover	15 to 20 lbs.
56 lbs.	Corn, for soiling	1 to 2 bus.
24 lbs.	English Rye or Perennial Rye	50 lbs.
20 lbs.	Evergreen Lawn	3 to 4 bus.
56 lbs.	Flax, for seed	1 bus.
.. lbs.	Flax, for fiber	2 to 3 bus.
56 lbs.	Field Corn, in hills	4 qts.
50 lbs.	German Millet	50 lbs.
48 lbs.	Hungarian Millet	48 lbs.
44 lbs.	Hemp	22 lbs.
20 lbs.	Italian Rye	50 lbs.
14 lbs.	Kentucky Blue	38 lbs.
22 lbs.	Meadow Fescue	50 lbs.
7 lbs.	Meadow Foxtail	30 lbs.
14 lbs.	Orchard Grass	42 lbs.
32 lbs.	Oats, broadcast	2 to 2½ bus.
10 lbs.	Red Top, chaff	40 to 50 lbs.
14 lbs.	Red Top, unhulled	30 to 40 lbs.
32 lbs.	Red Top, fancy	6 to 8 lbs.
60 lbs.	Red Clover	15 lbs.
56 lbs.	Rye, broadcast	1 bus.
12 lbs.	Sheep Fescue	30 lbs.
48 lbs.	Sorghum, drills	4 qts.
.. lbs.	Sorghum, broadcast	8 qts.
10 lbs.	Tall Meadow Oat	50 lbs.
45 lbs.	Timothy, alone	¼ bus.
.. lbs.	Timothy, with other grasses	8 lbs.
	Together for an acre	
.. lbs.	Red Clover	8 lbs.
.. lbs.	Timothy	10 lbs.
.. lbs.	Red Top	14 lbs.
.. lbs.	Teosinte, in hills	1 to 3 lbs.
60 lbs.	Vetches, broadcast	1 bus.
14 lbs.	Wood Meadow	30 lbs.
60 lbs.	White Clover, alone	6 lbs.
.. lbs.	White Clover, with other grasses	3 lbs.
60 lbs.	Wheat, broadcast	1½ to 2 bus.
.. lbs.	Wheat, in drills	1½ to 2 bus.

VEGETABLE SEED TABLE

THE QUANTITY OF SEED USUALLY SOWN TO AN ACRE.

Asparagus	5 lbs
Beans, dwarf in drills	½ to ¾ bus.
Beans, pole, in hills	8 to 10 qts.
Beet, in drills	4 to 6 lbs.
Cabbage, in beds, to transplant	¼ lb.
Carrot, in drills	2 to 3 lbs.
Celery, to transplant	½ lb.
Corn, in hills (sugar)	4 qts.
Kale	4 to 6 lbs.
Melon, musk	1½ to 2 lbs.
Melon, water	2 to 3 lbs.
Mustard, broadcast	12 to 16 lbs.
Mangel wurzel	4 to 6 lbs.
Onions, in drills to make large onions	6 to 8 lbs.
Onion Seeds, for small sets	40 to 60 lbs.
Parsnips, in drills	4 to 6 lbs.
Peas, early, in drills	1¼ bus.
Peas, Marrowfat, in drills	1¼ bus.
Peas, broadcast	2 to 3 bus.
Potato, cut tubers in drills	8 to 11 bus.
Radish, in drills	6 to 8 lbs.
Radish, broadcast	10 lbs.
Salsify, in drills	6 to 8 lbs.
Spinach, in drills	12 to 20 lbs.
Squash, bush varieties, in hills	4 to 6 lbs.
Squash, running varieties, in hills	3 to 4 lbs.
Turnip, in drills	1 lb.
Turnip, broadcast	2 lbs.
Tomato, to transplant	¼ lb.

Plant "Wisdom" Tomato (See Page 23)

FERTILIZERS

ACID or ROCK PHOSPHATE (16%)

Used for mixing with other Fertilizers to increase the Phosphoric Acid Analysis. **167 lbs. $2.50; ton $20.00.**

ASHES, HARD WOOD

Potash content very high, extensively used in green house soil for Potting. **100 lbs. $3.00; ton $42.50.**

BLOOD (DRIED)

Very quick in action. Excellent for Roses and other garden flowers. Also used quite extensively in greenhouses. **5 lbs. 50c; 10 lbs. 80c; 50 lbs. $3.00; 100 lbs. $5.50.**

BONE FLOUR

Very fine and bolted. Acts almost immediately. Rich in Phosphoric Acid and Ammonia. Exceptionally good for Roses. **25 lbs. $1.50; 100 lbs. $4.50.**

BONE MEAL

Made from pure Raw Bone. For outside or indoor plants. **5 lbs. 25c; 25 lbs. $1.00; 100 lbs. $3.50.**

BLOOD BONE AND TANKAGE MIXTURE 4-8-4

Excellent for all kinds of truck such as Beans, Peas, Tomatoes, etc. **5 lbs. 25c; 167 lb. bag $3.50; ton $36.00.**

CLAY'S FERTILIZER

Used dried or liquid form. Fine for use in greenhouse work. Excellent for forcing. **28 lbs. $3.75; 56 lbs. $6.25; 112 lb. bag $12.00.**

LIME (HYDRATED)

Very good for lawns. Sweetens the soil and prevents weeds to a certain extent. **50 lb. bag 90c; ton $20.00.**

MULFORD CULTURE

For inoculating Clovers and other Legumes, such as Beans, Peas and such other plants that have blossoms similar in shape and form to the above named. The application of bacteria to the seed of these legumes when planting practically trebles the nitrogen-gathering powers and for this reason we urge all planters to use it. In ordering, please state what crops you wish to inoculate. For inoculating Beans, Peas and Sweet Peas, garden size, **35c.** For Alfalfa and Clovers, ½ bu. size, **60c;** 1 bu. size, **$1.00;** 2½ bu. size, **$2.25;** 10 bu. size, **$8.00.** For Cow Peas, Soy Beans, Canada Peas, Vetch, Beans, Peas and Sweet Peas, 1 bu. size, **60c;** 2 bu. size, **$1.00;** 5 bu. size, **$2.25;** 20 bu. size, **$8.00.**

NITRAGIN

A legume bacteria, the original soil inoculator; enriches the soil, increases yield; hastens maturity. Always state when ordering kind of seed you wish to inoculate. Garden size for Beans, Peas and Sweet Peas, **20c.** For Beans, Peas, Sweet Peas, Alfalfa, Clovers, Vetch and Canada Peas, ¼ bu. size, **40c;** ½ bu. size, **60c;** 1 bu. size, **$1.00;** 5 bu. size, **$4.75.** For Cow Peas and Soy Beans, ½ bu. size, **40c;** 1 bu. size, **70c;** 5 bu. size, **$2.50.**

NITRATE OF SODA

Apply 100 to 150 lbs. per acre, mixing with land plaster or other fertilizers to render application more easy. Use only after plants are above ground. If used in liquid form dilute 2 ozs. to 1 gal. of water and do not apply oftener than twice a week. 5 lbs. **45c;** 10 lbs. **85c;** 25 lbs. **$1.50;** 50 lbs. **$2.50;** 100 100 lbs. **$4.50;** 200 lbs. **$8.50;** ½ ton **$39.00;** 1 ton **$75.00.**

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

THE EVER INCREASING DEMAND FOR OUR

"WISDOM EVERGREEN LAWN GRASS SEED"

IS DUE ENTIRELY TO THE QUALITY OF THE SEED THAT ENTERS INTO IT AND SHOULD NOT BE CONFOUNDED WITH THE CHEAPER GRADES OFFERED ON THE MARKET

FOR A GOOD LAWN

TRY THE

"WISDOM EVERGREEN"

1 lb. 40c - 2 lbs. 75c - 5 lbs. $1.60

1 bu. of 20 lbs. $6.00

SHADY NOOK LAWN GRASS

This is an exceptionally good mixture of different grasses especially adapted for lawns that are not too densely shaded.

1 lb. 40c; - 2 lbs. 75c - 5 lbs. $1.60
1 bu. of 20 lbs. $6.00

TERRACE SOD MIXTURE

Our mixture consists of deep rooted grasses suitable for embankments or terraces that are inclined to wash during heavy rains.

1 lb. 50c; - 2 lbs. 90c - 5 lbs. $2.00
1 bu. of 30 lbs. $10.00

THE BELVEDERE PRESS INC., BALTIMORE, MD.